DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY OPERATING/CONSTRUCTION PERMIT

Permit No. 167TVP01 Issue Date: March 31, 2003
Application No. 167 Expiration Date: March 30, 2008

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating/construction permit to the Permittee, **BP Exploration (Alaska) Inc.**, for the operation of the **Flow Station #1**.

This permit satisfies the obligation of the owner and operator to obtain an operating/construction permit as set out in AS 46.14.130(a) and (b).

As set out in AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this operating/construction permit.

All facility-specific terms and conditions of Air Quality Control Permit-to-Operate No. 9273-AA017 as amended through December 20, 1996 have been incorporated into this operating/construction permit. This permit, in accordance with the provisions of 18 AAC 50.305(a)(3), revises or rescinds specific terms and conditions of Air Quality Control Permit-to-Operate 9273-AA017.

This Operating/Construction Permit becomes effective April 30, 2003.

John F. Kuterbach, Manager

Air Permits Program

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List of Abbreviations Used in this Permit

AAC .....Alaska Administrative Code
ADEC.....Alaska Department of Environmental Conservation
AS .....Alaska Statutes
ASTM .....American Society for Testing and Materials
BACT.....Best Available Control Technology
C.F.R. .....Code of Federal Regulations
CO .....Carbon Monoxide
dscf.....Dry standard cubic foot
EPA .....US Environmental Protection Agency
gr./dscf .....grain per dry standard cubic foot (1 pound = 7000 grains)
GPH.....gallons per hour
HAPs or HACs.....Hazardous Air Pollutants or Hazardous Air Contaminants [*HAPs* or *HACs* as contained in AS 46.14.990(14)]
ID .....Source Identification Number
kPa.....kiloPascals
LAER .....Lowest Achievable Emission Rate
MACT .....Maximum Achievable Control Technology as contained in 40 C.F.R. 63.
MR&R.....Monitoring, Recordkeeping, and Reporting
NESHAPs .....Federal National Emission Standards for Hazardous Air Pollutants [*NESHAPS* as contained in 40 C.F.R. 61]
NO_X.....Nitrogen Oxides
NSPS .....Federal New Source Performance Standards [*NSPS* as contained in 40 C.F.R. 60]
O & M .....Operation and Maintenance
O_2 .....Oxygen
PM-10 .....Particulate Matter less than or equal to a nominal ten microns in diameter
ppm .....Parts per million
ppmv .....Parts per million by volume
ppmvd .....Parts per million by volume on a dry basis
psia .....Pounds per Square Inch (at atmospheric pressure)
PSD .....Prevention of Significant Deterioration
PTE .....Potential to Emit
SIC. .....Standard Industrial Classification
SO_2 .....Sulfur dioxide
TPH .....Tons per hour
TPY .....Tons per year
VOC .....volatile organic compound [*VOC* as defined in 18 AAC 50.990(103)]
VOL .....volatile organic liquid [*VOL* as defined in 40 C.F.R. 60.111b, Subpart Kb]
wt% .....weight percent

Section 1. Identification

Names and Addresses

Permittee:

BP Exploration (Alaska) Inc.
900 East Benson Blvd.
P.O. Box 196612
Anchorage, AK 99519-6612

Facility Name: Flow Station #1

Location: Section 31, Township 11N, Range 15E, Umiat Meridian

Physical Address: Prudhoe Bay, Alaska

Owner:

BP Exploration (Alaska) Inc.
900 E. Benson Blvd. (zip 99508)
P.O. Box 196612
Anchorage, AK 99519-6612

Forest Oil Corporation
310 K Street, Suite 700
Anchorage, AK 99501

ConocoPhillips Alaska Inc.
700 G Street (zip 99501)
P.O. Box 100360
Anchorage, AK 99510-0360

ChevronTexaco
11111 S. Wilcrest (zip 77099
P.O. Box 36366
Houston, TX 77236

ExxonMobil Alaska Product Inc.
3301 C Street, Suite 400 (zip 99503)
P.O. Box 196601
Anchorage, AK 99511-6601

Operator:

BP Exploration (Alaska) Inc.
900 E. Benson Blvd
P.O. Box 196612
Anchorage, AK 99519-6601

Permittee's Responsible Official: Craig L. Wiggs, GPB Operations Manager

Designated Agent:

CT Corporation
Juneau, AK

Facility and Building Contact:

Greg Alexander and Rob Henry
(907) 659-5392

Fee Contact:

Jim Pfeiffer
pfeiffja@bp.com

Facility Process Description

SIC Code of the Facility: 1311 - Crude Petroleum and Natural Gas Production
NAICS Code of the Facility: 211111

[18 AAC 50.350(b)(1), 1/18/97]

Section 2. General Emission Information

[18 AAC 50.350(b)(1), 1/18/97]

Emissions of Regulated Air Contaminants, as provided in the Permittee's application:

Nitrogen Oxides, Sulfur Dioxide, Particulate Matter (PM-10), Carbon Monoxide, Volatile Organic Compounds, and hazardous air pollutants (HAPs)

Operating Permit Classifications:

1. 18 AAC 50.325(b)(1) Facility has potential to emit more than 100 tpy of a regulated air contaminant
2. 18 AAC 50.325(b)(3) Facility has a source subject to new source performance standards
3. 18 AAC 50.325(c) Facility is described under 18 AAC 50.300(b) – (e)

Facility Classifications as described under 18 AAC 50.300(b)-(f):

1. 18 AAC 50.300(b)(2) Facility contains equipment with a rated capacity of 100 million Btu per hour or more
2. 18 AAC 50.300(c)(1) Facility has a potential to emit 250 tpy of a regulated air contaminant in an area designated attainment or unclassifiable for that air contaminant under 18 AAC 50.015

Section 3. Source Inventory and Description

[18 AAC 50.350(d)(2), 1/18/97]

Sources listed in Table 1 have specific monitoring, record keeping, or reporting conditions in this permit. Source descriptions and ratings are given for identification purposes only.

Table 1 - Source Inventory

ID	Tag No.	Source Name	Source Description	Rating/size	Commenced Construction/ Startup/ Modification Date[1]
Gas Turbines					
1	NGT-15-1801	GE LM 1500	STV/IP Gas Compressor	14,200 hp ISO	9/21/73
2	NGT-15-1802	GE-LM 1500	STV/IP Gas Compressor	14,200 hp ISO	9/21/73
3	NGT-15-1803	GE MS 5352B	LPS Gas Compressor	35,000 hp ISO	1983
4	NGT-15-1804	GE MS 5352B	LPS Gas Compressor	35,000 hp ISO	1983
5	NGT-15-15107	EGT (Ruston) TB 5000	Produced Water Injection Pump	4,900 hp ISO	6/19/80
Gas-Fired Heaters					
6	NGH-15-1431	Broach Glycol Process Heater	Heater	38.0 MMBtu/hr (Heat input, LHV)	5/2/74
7	NGH-15-1433	Broach Glycol Process Heater	Heater	38.0 MMBtu/hr (Heat input, LHV)	5/2/74
8	NGH-15-1481	Broach Glycol Utility Heater	Heater	26.6 MMBtu/hr (Heat input, LHV)	5/2/74
9	NGH-15-1491	Broach Glycol Utility Heater	Heater	26.6 MMBtu/hr (Heat input, LHV)	5/2/74
10	NGH-15-1495	Econotherm Glycol Heater	Heater	79.9 MMBtu/hr (Heat input, LHV)	1994
11	NGH-15-1496	Econotherm Glycol Heater	Heater	67.8 MMBtu/hr (Heat input, LHV)	1994
12	NGH-15-14001	Smith Industries TEG Reboiler	Heater	16.185 MMBtu/hr (Heat input, LHV)	1994
13	NGH-15-2801	BS&B TEG Reboiler	Heater	6.8 MMBtu/hr (Heat input, LHV)	12/17/74
14	NGH-15-2811	BS&G TEG Reboiler	Heater	6.8 MMBtu/hr (Heat input, LHV)	12/17/74
Diesel-Fired Equipment					
15	EDG-15-2882	White Superior Emergency Generator	Generator	2,180 hp (1,626 kW)	8/21/75
16	EDG-15-1553C	Cummins Emergency Fire Water Pump	Fire Water Pump	300 hp	unknown
Flares					
17	HP/IP Flares, STV Flares	Emergency Flares	Flare	1.550 MMscf/day (pilot/sweep/purge/assist) combined total for all flares	After 1979
18	15-14000A	HP S-1 Emergency Flare	Flare		1994
19	15-14000B	HP S-2 Emergency Flare	Flare		1994
Tank					
20	15-1951	Overflow/Dirty Water Tank	Tank	10,472 bbls	1981

1-Date construction commenced (if known) or the startup date of the unit. If a unit has been modified as defined by AS 46.14.990, then the most recent modification date is provided.

Section 4. Emission Fees

1. Assessable Emissions. The Permittee shall pay to the Department an annual emission fee based on the facility's assessable emissions as determined by the Department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410(b). The Department will assess fees per ton of each air contaminants that the facility emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of

1.1 the facility's assessable potential to emit of 3,910 TPY; or

1.2 the facility's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12 month period approved in writing by the Department, when demonstrated by

a. an enforceable test method described in 18 AAC 50.220;

b. material balance calculations;

c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or

d. other methods and calculations approved by the Department**.**

[18 AAC 50.346(a)(1), 5/3/02 and 18 AAC 50.350(c) & 50.400 – 50.420, 1/18/97]

2. Assessable Emission Estimates. Emission fees will be assessed as follows:

2.1 no later than March 31 of each year, the Permittee may submit an estimate of the facility's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795**;** the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or

2.2 If no estimate is received on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in condition 1.1.

[18 AAC 50.346(a)(1), 5/3/02 and 18 AAC 50.350(c) & 50.400 – 50.420, 1/18/97]

Section 5. Source-Specific Requirements

Fuel-Burning Equipment

3. Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from Source ID(s) 1, 2, and 6 through 19 listed in Table 1 to reduce visibility through the exhaust effluent by any of the following:

a. more than 20% for more than three minutes in any one hour,[1]

[18 AAC 50.055(a)(1), 1/18/97 and 18 AAC 50.350(d)(1)(C), 6/21/98
[40 CFR 52.70, 11/18/98]

b. more than 20% averaged over any six consecutive minutes.

[18 AAC 50.055(a)(1) & 50.346(c), 5/3/02 and 18 AAC 50.350(d)(1)(C), 6/21/98]

The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from Source ID(s) 3 through 5 listed in Table 1 to reduce visibility through the exhaust effluent by any of the following:

c. more than 20% for more than three minutes in any one hour,[1]

[18 AAC 50.055(a)(1), 1/18/97 and 18 AAC 50.350(d)(1)(C), 6/21/98]
[40 CFR 52.70, 11/18/98]

d. more than 20% averaged over any six consecutive minutes,

[18 AAC 50.055(a)(1) & 50.346(c), 5/3/02 and 18 AAC 50.350(d)(1)(C), 6/21/98]

e. more than 10% averaged over any six consecutive minutes.

[Prudhoe Bay Unit PSD Permit No. PSD-X80-09, as amended 8/29/1997]

3.1 For Source ID(s) 1 through 14, burn only gas as fuel. Monitoring for these sources shall consist of an annual certification that each of these sources fired only gas. Report under condition 61 if any fuel is burned other than gas.

3.2 For Source ID(s) 15 & 16, monitor, record and report visible emissions in accordance with Section 6.

3.3 For Source ID(s) 17 through 19 (flares), monitor, record and report in accordance with condition 28.

[18 AAC 50.350(g) - (i) & 50.346(c), 5/3/02]

4. Particulate Matter. The Permittee shall not cause or allow particulate matter emitted from Source ID(s) 1 through 19 listed in Table 1 to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[1] For purposes of this permit, the "more than three minutes in any one hour" criterion in this condition and condition 32 will no longer be effective when the Air Quality Control (18 AAC 50) regulation package effective 5/3/02 is adopted by the U.S. EPA. The six-minute average standard is enforceable only by the state until the new regulations dated May 3, 2002 is approved by EPA into the SIP at which time this standard becomes federally enforceable.

[18 AAC 50.346(c), 5/3/02; 18 AAC 50.055(b)(1), 1/18/97and 18 AAC 50.350(d)(1)(C), 6/21/98]

4.1 For Source ID(s) 1 through 14, burn only gas as fuel. Monitoring for these sources shall consist of an annual certification that each of these sources fired only gas. Report under condition 61 if any fuel is burned other than gas.

4.2 For Source ID(s) 15 & 16, monitor, record and report in accordance with Section 6.

4.3 For Source ID(s) 17 through 19 (flares) the Permittee must annually certify compliance with the particulate matter standard under condition 64.

[18 AAC 50.346(c) & 50.350(g) – (i), 5/3/02]

5. Sulfur Compound Emissions. In accordance with 18 AAC 50.055(c), the Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from Source ID(s)1 through 19 to exceed 500 ppm averaged over three hours.

[18 AAC 50.346(c), 5/3/02; 18 AAC 50.055(c), 1/18/97; and 18 AAC 50.350(d)(1)(C), 6/21/98]

5.1 For Source ID(s) 1 through 14 and 17 through 19 using fuel gas:

a. Monitoring conducted as required by condition 21.1 satisfies the monitoring requirements necessary to assure compliance with this condition.

b. Keep records of analyses conducted in accordance with condition 21.1.

c. Report as excess emissions, in accordance with condition 61, whenever the fuel combusted causes sulfur compound emissions to exceed the standard of condition 5.

d. Include copies of the records required by condition 5.1b with the facility operating report required by condition 63.

[18 AAC 50.350(g) - (i), 1/18/97]

5.2 For Source ID(s) 15 & 16, using liquid fuel from a North Slope topping plant, the Permittee shall obtain from the topping plant the results of a monthly fuel sulfur analysis.

a. The Permittee shall include in the facility operating report required by condition 63 a list of the sulfur content measured for each month covered by the report.

b. If the fuel sulfur contains greater than 0.75% sulfur by weight, the Permittee shall calculate SO_2 emissions in PPM using either the SO_2 material balance calculation in Section 16, or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).

c. If SO_2 emissions are calculated under condition 5.2b to exceed 500 ppm, the Permittee shall report under condition 61. The report shall document the calculation under condition 5.2b.

d. For fuel with a sulfur content greater than 0.75% by weight, the Permittee shall include in the facility operating report required by condition 63 the calculated SO_2 emissions in PPM.

[18 AAC 50.346(c) & 350(g) - (i), 5/3/02]

BACT Emission Limits

6. The Permittee shall limit actual emissions from the turbines, Source ID(s) 3 through 5, as indicated in Table 2 below. Limits in Table 2 are not to be exceeded.

[Federal Prudhoe Bay Unit PSD Permit No. PSD-X80-09, as amended 8/29/1997]

6.1 The Permittee shall calculate the monthly and the twelve-month consecutive summation of emissions for NO_x, CO, and PM for Source ID(s) 3 through 5. Use the emission factors found in Section 17 of this permit along with the hours of operation and/or amount of fuel used, to calculate the monthly emissions for each unit.

6.2 Report the monthly and the consecutive twelve-month period summation of emissions, for each month of the reporting period, with each facility operating report required by condition 63.

6.3 Notify the Department per condition 61 should the twelve-month consecutive summation of emissions of any air contaminant exceed the limit for that contaminant in condition 6.

6.4 Monitor, record, and report in accordance with condition 20 to demonstrate compliance with the short-term BACT NO_X emission limit in Table 2.

[18 AAC 50.350(g) – (i), 1/18/97]

Table 2 - BACT Emissions Limits (GE MS 5352B Turbines NGT-15-1803 and NGT-15-1804, and Ruston TB5000 Turbine NGT-15-15107)

Pollutant	Source ID No.	Turbine Model	Equipment Tag Number	Emission Limit (short-term) per Individual Turbine	Annual Emission Limit per Individual Turbine (tpy)
NO_X	3	GE/MS5352B	15-1803	173 ppmvd @ 15% O_2	1,115
	4	GE/MS5352B	15-1804	173 ppmvd @ 15% O_2	1,115
	5	Ruston/TB5000	15-15107	154 ppmvd @ 15% O_2	141
CO	3	GE/MS5352B	15-1803	0.17 lb/MMBtu for each unit	269
	4	GE/MS5352B	15-1804		269

Pollutant	Source ID No.	Turbine Model	Equipment Tag Number	Emission Limit (short-term) per Individual Turbine	Annual Emission Limit per Individual Turbine (tpy)
	5	Ruston/TB5000	15-15107		38
PM	3	GE/MS5352B	15-1803	0.014 lb/MMBtu for each unit	22
	4	GE/MS5352B	15-1804		22
	5	Ruston/TB5000	15-15107		3.2
Opacity	3	GE/MS5352B	15-1803	10%, consecutive 6-minute average for each unit	No Limit
	4	GE/MS5352B	15-1804		
	5	Ruston/TB5000	15-15107		

Notes: 1) All emission limitations are annual average unless otherwise noted.
2) All turbine group emission limits for NO_X refer to full load, ISO conditions.
3) All other emission limits refer to full load, standard conditions.

NO_X Emission Limits, Source ID(s) 10 through 12, and 18 and 19

7. The Permittee shall limit the oxides of nitrogen emissions from Source ID(s) 10 through 12 and Source ID(s) 18 and 19 as shown in Table 3 below. Limits in Table 3 are not to be exceeded.

[Operating Permit No. 9273-AA017, as amended through 12/20/96]

7.1 The Permittee shall maintain records that are available for inspection, which demonstrate that the unit burners and flares are maintained in good operating condition and in accordance with current BPXA established guidelines and operating procedures.

[18 AAC 50.350 (g) – (i), 1/18/97]

Table 3 - BACT Emissions Limits (Econotherm Heaters NGH-15-1495 and NGH-15-1496; Smith TEG Reboiler NGH-15-14001; and HP Flares 15-14000A and 15-14000B)

Pollutant	Source ID No.	Make/Model	Equipment Tag Number	Emission Limit (short-term) per Individual Unit	Annual Emission Limit per Individual Unit (tpy)
NO_X	10 11 12	Econotherm Glycol Heaters Smith TEG Reboiler	NGH-15-1495 NGH-15-1496 NGH-15-14001	0.08 lb/MMBtu	No Limit
	18 19	HP S-1 and S-2 Emergency Flares	15-14000A 15-14000B	0.068 lb/MMBtu	No Limit

Notes: 1) All emission limitations are annual average unless otherwise noted.

Fuel Consumption Monitoring

8. The Permittee shall maintain and operate fuel gas meters or provide other means of estimating fuel consumption to determine the total volume of fuel gas consumed by the turbines, (Source ID(s) 1 through 5) and the heaters (Source ID(s) 6 through 14). For other fuel-burning equipment (Source ID(s) 15 through 19) the fuel consumption may be estimated.

[Operating Permit No. 9273-AA017, as amended through 12/20/96]

8.1 Monitor and record the monthly fuel consumption for each of Source ID(s) 1 through 5 combined, Source ID(s) 6 through 14 combined, Source ID(s) 15 and 16 combined, and Source ID(s) 17 through 19 combined.

8.2 Report using the facility operating report under condition 63, the monthly total fuel consumption (MMscf/month or gallons/month) for Source ID(s) 1 through 5 combined, Source ID(s) 6 through 14 combined, Source ID(s) 15 and 16 combined, Source ID(s) 17 through 19 combined, and the facility total fuel consumption, for each month of the reporting period.

[18 AAC 50.350(g) – (i), 1/18/97]

Hours of Operation Monitoring for Fuel-Fired Sources

9. The Permittee shall monitor, record, and report the hours of operation as follows:

[Operating Permit No. 9273-AA017, as amended through 12/20/96]

9.1 Monitor and record the monthly operating time for each of Source ID(s) 1 through 16.

9.2 Report using the facility operating report required under condition 63, the monthly hours of operation for each of Source ID(s) 1 through 16.

[18 AAC 50.350 (g) – (i), 1/18/97]

Operating Hours for Gas Turbines, Source ID(s) 1 & 2

10. The Permittee shall operate the turbines, Source ID(s) 1 & 2, for no more than a combined total of 12,000 hours per consecutive twelve-month period.

[Operating Permit No. 9273-AA017, as amended through 12/20/96]

10.1 Monitor and record the monthly combined hours of operation and the consecutive twelve-month period summation of Source ID(s)1 & 2.

10.2 Report the monthly and consecutive twelve-month total of hours operated each month of the reporting period with the facility operating report required by condition 63.

10.3 Report under condition 61 if the combined consecutive twelve-month total hours of operation for any given month exceed the limit in condition 10.

[18 AAC 50.350 (g) – (i), 1/18/97]

Flue Gas Monitoring

11. The Permittee shall conduct monitoring of Source IDs 10 and 11 monthly for flue gas content of O_2 in accordance with the approved alternate monitoring plan dated January 10, 1995.

[Operating Permit No. 9273-AA017, as amended through 12/20/96]

11.1 Include copies of the records required by condition 11 with the facility operating report required by condition 63.

[18 AAC 50.350(g) – (i), 5/3/02]

Operating Hours for Emergency Equipment, Source ID(s) 15 & 16

12. The Permittee shall operate the emergency equipment, Source ID(s) 15 & 16, for no more than 200 hours each per calendar year. This limit does not include emergency operations.

[Operating Permit No. 9273-AA017, as amended through 12/10/96]

12.1 Monitor and record the monthly hours of non-emergency operation and the calendar year summation for each of Source(s) 15 & 16.

12.2 Report the monthly and calendar year total of hours (non-emergency modes) operated each month of the reporting period with the facility operating report required by condition 63.

12.3 Report under condition 61 if the calendar year total hours of non-emergency operation for any given month exceed the limit in condition 12.

[18 AAC 50.350 (g) – (i), 1/18/97]

Sources Subject to Federal New Source Performance Standards (NSPS), Subpart A

13. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements. The Permittee shall maintain records for Source ID(s) 3 through 5, 10 through 12, and 20 in accordance with 40 CFR 60.7(b).

[18 AAC 50.350(h), 5/3/02 & 18 AAC 50.040(a)(1), 7/2/00]
[40 C.F.R. 60.7(b), Subpart A, 7/1/99]

14. NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report. For Source ID(s) 3 through 5 the Permittee shall comply with 40 CFR 60.7(c) and (d).

[18 AAC 50.350(i), 1/18/97 & 18 AAC 50.040(a)(1), 7/2/00]
[40 C.F.R. 60.7(c) & (d), Subpart A, 7/1/99]

15. NSPS Subpart A Performance (Source) Tests. At such times as may be required by the NSPS Administrator, the Permittee shall conduct source tests for Source ID(s) 3 and 4 according to Section 11 of this permit and 40 C. F. R. 60.8 and shall provide the Department and EPA with a written report of the results of the source test.

[18 AAC 50.040(a)(1), 7/2/00]
[Federal Citation: 40 C.F.R. 60.8(a) - (e), Subpart A, 7/1/99]
[18 AAC 50.350(i), 1/18/97]

16. NSPS Subpart A Good Air Pollution Control Practice. The Permittee shall maintain and operate Source ID(s) 3 through 5, 10 through 12, and 20 in accordance with 40 CFR 60.11(d).

[18 AAC 50.040(a)(1), 7/2/00]
[40 C.F.R. 60.11(d), Subpart A, 7/1/99]

17. NSPS Subpart A Credible Evidence. The credible evidence rule of 40 CFR 60.11(g) applies to Source ID(s) 3 through 5, and 20.

[18 AAC 50.040(a)(1), 7/2/00]
[40 C.F.R. 60.11(g), Subpart A, 7/1/99]

18. NSPS Subpart A Concealment of Emissions. The Permittee shall not conceal emissions from Source ID(s) 3 through 5 as provided in 40 CFR 60.12. Monitoring shall consist of an annual certification that the Permittee does not conceal emissions.

[18 AAC 50.040(a)(1), 7/2/00]
[40 C.F.R. 60.12, Subpart A, 7/1/99]

Heaters Subject to NSPS Subpart Dc

19. The Permittee shall maintain records of the amount of fuel gas combusted during each day for Source ID(s) 10 through 12 in accordance with 40 CFR 60.48c(g) Subpart Dc.

[18 AAC 50.040(a)(2)(D), 7/2/00]
[40 C.F.R. 60.48c(g), Subpart Dc, 2/12/99]

Turbines Subject to NSPS Subpart GG NO_X Standard, Source ID(s) 3 and 4

20. NSPS Subpart GG NO_X Standard. The Permittee shall not allow the corrected exhaust gas concentration of NO_X from Source ID(s) 3 and 4 to exceed the standard found in 40 C.F.R. 60.332(a)(2). Based on the provisions of this standard, the exhaust gas concentration of NO_X from Source ID(s) 3 and 4 shall not exceed 173 ppmvd.

[18 AAC 50.040(a)(2)(V), 7/2/00]
[40 C.F.R. 60.332(a)(2), Subpart GG, 7/1/99]

20.1 **Monitoring.**

a. **Waivers**. The Permittee shall provide to the Department a written copy of any U.S. EPA granted waiver of the federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirements, or approved custom monitoring schedules upon request by the Department. The Permittee shall keep a copy of each U.S. EPA issued monitoring waiver or custom monitoring schedule on file.

b. **Periodic Testing**.

(i) **Initial Periodic Testing.** For each turbine subject to condition 20 that operates for 400 hours or more in any 12 month period during the life of this permit, the Permittee shall satisfy either condition 20.1b(i)(A) or 20.1b(i)(B).

(A) For existing turbines not represented by emission data described in condition 20.1b(i)(B), the Permittee shall conduct a NO_x and O_2 source test under 40 C.F.R. 60, Appendix A-7, Method 20 or following another protocol approved by the Department within three years after issuance of this permit

(1) for each turbine, or

(2) on one turbine to represent a group of turbines, if allowed to do so under condition 20.1c.

(B) If a test following 40 C.F.R. 60, Appendix A-7, Method 20 or following another protocol approved by the Department has been conducted on a turbine within two years before the issuance date of this permit, and the test shows that emissions at maximum load are less than 90 percent of the emission limit in condition 20, then

(1) the Permittee may use those test results to represent emissions from that turbine or for a group of turbines if allowed under condition 20.1c until the testing of condition 20.1b(i)(B)(2) is performed; and

(2) the Permittee shall conduct a Method 20 test or a test following any other protocol approved by the Department on each turbine, or on one of a group of turbines as allowed under condition 20.1c, within the 5 years of the permit term.

(ii) **Higher Tier Testing.** For each turbine with test results under condition 20.1b(i) that are 90 percent or more of the emission limit of condition 20, or for which emissions will equal or exceed 90% of the emission limit at maximum load, as shown through condition 20.1d, the Permittee shall conduct an additional Method 20 test or a test following any other protocol approved by the Department for the turbine within one year of the test under condition 20.1b(i). The Permittee shall conduct at least one additional test per year until at least two consecutive tests show that emissions for the turbine are less than 90 percent of the limit at loads up to maximum load.

c. **Substituting Test Data.** The Permittee may use a test under conditions 20.1b(i) or 20.1b(ii) performed on only one of a group of turbines to satisfy the requirements of those conditions for the other turbines in the group if

(i) the Permittee demonstrates that test results are less than 90% of the emission limit of condition 20, and are projected under condition 20.1d to be less than 90% of the limit at maximum load;

(ii) for any source test done after the issuance date of this permit, the Permittee identifies in a source test plan under condition 53

(A) the turbine to be tested;

(B) the other turbines in the group that are to be represented by the test; and

(C) why the turbine to be tested is representative, including that each turbine in the group

(1) is located at a facility operated and maintained by the Permittee;

(2) is the same make and model and has identical fuel nozzles and combustor; and

(3) uses the same fuel type.

(iii) for any source test done before the issuance date of this permit and used under condition 20.1b(i)(B), the Permittee

(A) demonstrates why the test results are representative of emissions from the entire group of turbines, including that each turbine in the group

(1) is located at a facility operated and maintained by the Permittee;

(2) is the same make and model and has identical fuel nozzles and combustor; and

(3) uses the same fuel type.

(B) submits all results of source testing that has been performed on each turbine in the group, regardless of the date of the test, and certifies that the submittal is complete, consistent with 18 AAC 50.205.

d. **Load**.

(i) The Permittee shall conduct all tests under condition 20.1b in accordance with 40 C.F.R. 60.335(c)(3), except as otherwise approved in writing by the Department, or by EPA if the circumstances at the time of the EPA approval are still valid. For the highest load condition, if it is not possible to operate the turbine during the test at maximum load, the Permittee will test the turbine when operating at the highest load achievable by the turbine under the ambient and facility operating conditions in effect at the time of the test.

(ii) The Permittee shall demonstrate in the source test plan for any test performed after the issue date of this permit whether the test is scheduled when maximum NO_x emissions are expected.

(iii) If the highest operating rate tested is less than the maximum load of the tested turbine or another turbine represented by the test data,

(A) for each such turbine the Permittee shall provide to the Department as an attachment to the source test report

(1) additional test information from the manufacturer or from previous testing of units in the group of turbines; if using previous testing of the group of turbines, the information must include all available test data for the turbines in the group, and

(2) a demonstration based on the additional test information that projects the test results from condition 20.1b to predict the highest load at which emissions will comply with the limit in condition 20.

(B) the Permittee shall not operate any turbine represented by the test data at loads for which the Permittee's demonstration predicts that emissions will exceed the limit of condition 20;

(C) the Permittee shall comply with a written finding prepared by the Department that

(1) the information is inadequate for the Department to reasonably conclude that compliance is assured at any load greater than the test load, and that the Permittee must not exceed the test load;

(2) the highest load at which the information is adequate for the Department to reasonably conclude that compliance assured is less than maximum load, and the Permittee must not exceed the highest load at which compliance is predicted, or

(3) the Permittee must retest during a period of greater expected demand on the turbine.

(D) the Permittee may revise a load limit by submitting results of a more recent approved test done at a higher load, and, if necessary, the accompanying information and demonstration described in condition 20.1d(iii)(A); the new limit is subject to any new Department finding under condition 20.1d(iii)(C).

(iv) In order to perform an emission test, the Permittee may operate a turbine at a higher load than that prescribed by condition 20.1d(iii).

(v) For the purposes of conditions 20.1a through 20.3, maximum load means the hourly average load that is the smallest of

(A) 100 percent of manufacturer's design capacity of the gas turbine at ISO standard day conditions;

(B) the highest load allowed by an enforceable condition that applies to the turbine; or

(C) the highest load possible considering permanent physical restraints on the turbine or the equipment which it powers.

20.2 **Recordkeeping**.

a. The Permittee shall comply with the following for each turbine for which a demonstration under condition 20.1d(iii) does not show compliance with the limit of condition 20 at maximum load.

(i) The Permittee shall keep records of

(A) load; or

(B) as approved by the Department, surrogate measurements for load and the method for calculating load from those measurements.

(ii) Records in condition 20.2a shall be hourly or otherwise as approved by the Department.

(iii) Within one month after submitting a demonstration under condition 20.1d(iii)(A)(2) that predicts that the highest load at which emissions will comply is less than maximum load, or within one month of a Department finding under condition 20.1d(iii)(C), whichever is earlier, the Permittee shall propose to the Department how they will measure load or load surrogates, and shall propose and comply with a schedule for installing any necessary equipment and beginning monitoring. The Permittee shall comply with any subsequent Department direction on the load monitoring methods, equipment, or schedule.

b. For any turbine subject to condition 20, that will operate less than 400 hours in any 12 consecutive months, keep monthly records of the hours of operation. If a turbine that normally operates less than 400 hours exceeds that total during any 12 month period,

(i) test according to condition 20.1b; or

(ii) if it is no longer possible to meet that schedule, test within one year of exceeding 400 hours in 12 consecutive months.

20.3 **Reporting**.

a. In each facility operating report under condition 63 the Permittee shall list for each turbine tested or represented by testing at less than maximum load and for which the Permittee must limit load under condition 20.1d(iii)

(i) the load limit;

(ii) the turbine identification; and

(iii) the highest load recorded under condition 20.2a during the period covered by the operating report.

b. In each facility operating report under condition 63 for each turbine for which condition 20.1b has not been satisfied because the turbine normally operates less than 400 hours in any 12 months, the Permittee shall identify

(i) the turbine;

(ii) the highest number of operating hours for any 12 months ending during the period covered by the report; and

(iii) any turbine that operated for 400 or more hours.

c. The Permittee shall report under condition 61 if

(i) a test result exceeds the emission standard;

(ii) testing is required under condition 20.1b or 20.2b but not performed, or

(iii) the turbine was operated at a load exceeding that allowed by conditions 20.1d(iii)(B) and 20.1d(iii)(C); exceeding a load limit is deemed a single violation rather than a multiple violation of both monitoring and the underlying emission limit.

[18 AAC 50.350(g) - (i), 5/3/02, 50.220(a) - (c), 1/18/97, & 50.040(a)(1), 7/2/00]

21. NSPS Subpart GG Sulfur Standard. The Permittee shall not allow the sulfur content of the fuel burned in Source ID(s) 3 through 5 to exceed 0.8 percent by weight.

[18 AAC 50.040(a)(2)(V), 7/2/00]
[40 C.F.R. 60.333(b), Subpart GG, 7/1/99]

21.1 Monitoring - Monitor, record, and report the sulfur content of the fuel gas fired in Source ID(s) 3 through 5 in accordance with either 40 CFR 60.334(b), (c) and §60.335(d), or the custom schedule and plan approved July 13, 1993 (in conjunction with follow-up correspondence dated August 20, 1993, October 18, 1993, and August 19, 1996) and October 2, 1997, or a revised custom schedule and plan approved in accordance with 40 CFR 60.334(b)(2).

[40 C.F.R. 60.334 & 60.335(d), Subpart GG, 7/1/99]
[Alternative Monitoring Schedule, 7/13/93 (with additional correspondence dated 8/20/93, 10/18/93, and 8/19/96)]
[Alternative Monitoring Plan, 10/2/97]

a. The fuel sulfur analysis required under this condition may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

[40 C.F.R. 60.335(e) Subpart GG, 7/1/99]

21.2 Recordkeeping - Keep records of analysis conducted under condition 21.1.

21.3 The Permittee shall semi-annually report to the EPA results of all sulfur monitoring required by this condition.

[40 C.F.R. 60.334(c)(2), Subpart GG, 7/1/99]

21.4 Reporting - For the purpose of EEMSP reports and summary report required under condition 14, the Permittee shall report in accordance with 40 C.F.R. 60.334(c)(2).

[18 AAC 50.350(i), 1/18/97]
[40 C.F.R. 60.334(c)(2), Subpart GG, 7/1/99]

Section 6. Visible Emissions and PM Monitoring, Recordkeeping and Reporting

Liquid-Fired Sources, Source ID(s) 15 & 16

22. Visible Emissions Monitoring. The Permittee shall observe the exhaust of Source ID(s) 15 & 16 for visible emissions using the Method 9 Plan under condition 22.1.

22.1 **Method 9 Plan.** For all 18-minute observations in this plan, observe exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.

a. First Method 9 Observation. Observe exhaust for 18 minutes within six months after the effective date of this permit.

b. Second Method 9 Observation. Observe exhaust per condition 22.1 within 30 days after the end of a calendar month in which the cumulative hours of operation on liquid fuel for the past 12 consecutive months exceed 400, except when an 18-minute Method 9 observation has already been conducted in accordance with condition 22.1 in the same 12 consecutive month period and the source appears to not have excess visible emissions while in operation.

c. Third Method 9 Observation. Observe exhaust per condition 22.1 within 30 days after the end of a calendar month in which the cumulative hours of operation on liquid fuel for the past 12 consecutive month period exceed 800.

d. Increased Method 9 Frequency. If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that source to at least monthly intervals, until a six-minute average opacity observed during the most recent set of observations is not greater than 15 percent or no more than one observation is greater than 20 percent.

23. Visible Emissions Recordkeeping. The Permittee shall keep records in accordance with this condition.

23.1 When conducting the Method 9 observations of condition 22.1

a. the observer shall record

(i) the name of the facility, emissions source and location, facility type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet in Section 15;

(ii) the time, estimated distance to the emissions location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating rate (load or fuel consumption rate) on the sheet at the time opacity observations are initiated and completed;

(iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;

(iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation Record in Section 15, and

(v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period;

b. to determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet;

c. calculate and record the highest 18-consecutive-minute average observed.

24. Visible Emissions Reporting. The Permittee shall report visible emissions as follows:

24.1 include in each facility operating report under condition 63

a. copies of the observation results (i.e. opacity observations), except for the observations the Permittee has already supplied to the Department; and

b. a summary to include:

(i) number of days observations were made;

(ii) highest six-minute average observed; and

(iii) dates when one or more observed six-minute averages were greater than 20 percent;

24.2 a summary of any monitoring or record keeping required under conditions 22 and 23 that was not done;

24.3 report under condition 61:

a. the results of Method 9 observations that exceed an average 20 percent for any six-minute period; and

b. if any monitoring under condition 22 was not performed when required.

[18 AAC 50.346(c) & 50.350(g) – (i), 5/3/02]

25. Particulate Matter Monitoring for Diesel Engines. The Permittee shall conduct source tests on diesel engines, Source ID(s) 15 & 16, to determine the concentration of particulate matter (PM) in the exhaust of a source in accordance with the following.

25.1 Within six months of exceeding the criteria of condition 25.2a or 25.2b, either

a. conduct a PM source test according to requirements set out in Section 11; or

b. make repairs so that emissions no longer exceed the criteria of condition 25.2; to show that emissions are below those criteria, observe emissions as described in condition 22.1 under load conditions comparable to those when the criteria were exceeded.

25.2 Conduct the test according to condition 25.1 if

a. 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent, or

b. for a source with an exhaust stack diameter that is less than 18 inches, 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity that is greater than 15 percent and not more than 20 percent, unless the Department has waived this requirement in writing.

25.3 During each one hour PM source test run, observe the exhaust for 18 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one-hour test run. Submit a copy of these observations with the source test report.

25.4 The automatic PM source test requirement in conditions 25.1 and 25.2 is waived for an emissions unit if a PM source test on that unit has shown compliance with the PM standard during this permit term.

26. Particulate Matter Recordkeeping for Diesel Engines. Within 180 calendar days after the effective date of this permit, the Permittee shall record the exhaust stack diameter(s) of Source ID(s) 15 and 16. Report the stack diameter(s) in the next operating report under condition 63.

27. Particulate Matter Reporting for Diesel Engines. The Permittee shall report as follows:

27.1 report under condition 61

a. the results of any PM source test that exceeds the PM emissions limit; or

b. if one of the criteria of condition 25.2 was exceeded and the Permittee did not comply with either condition 25.1a or 25.1b;

27.2 report observations in excess of the threshold of condition 25.2b within 30 days of the end of the month in which the observations occur;

27.3 in each facility operating report under condition 63, include

a. the dates, Source ID(s), and results when an observed 18-minute average was greater than an applicable threshold in condition 25.2;

b. a summary of the results of any PM testing under condition 25; and

c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of condition 25.2, if they were not already submitted.

[18 AAC 50.346(c) & 50.350(g) – (i), 5/3/02]

Flares(Source ID(s) 17 through 19)

28. Visible Emissions Monitoring, Recordkeeping, and Reporting. The Permittee shall observe the first six daylight flare events[2] occurring during the life of this permit[3].

28.1 Monitor flare events using Method-9 for 18 minutes to obtain 72 individual 15-second readings.

28.2 Record the following information for observed events:

a. the flare(s) Source ID number;

b. results of the Method-9 observations;

c. reason(s) for flaring;

d. date, beginning and ending time of event; and

e. cumulative volume of gas flared.

28.3 Monitoring of a flare event may be postponed for safety or weather reasons, or because a qualified observer is not available. Until monitoring has been completed on the six flare events described in this condition, the Permittee shall either monitor each qualifying flare event or include in the next facility operating report required by condition 63 an explanation of the reason the event was not monitored.

[2] For purposes of this permit, a "flare event" is flaring of gas for greater than one hour as a result of scheduled release operations, i.e. maintenance or well testing activities. It does not include non-scheduled release operations, i.e. process upsets, emergency flaring, or de minimis venting of gas incidental to normal operations.
[3] Flare events monitored within 12-months prior to permit effective date may count towards the six-event total.

28.4 Attach copies of the records required by condition 28.2 with the facility operating report required by condition 63.

28.5 Report under condition 61 whenever the opacity standard in condition 3 is exceeded.

[18 AAC 50.350(g) – (i), 5/3/02]

Section 7. Facility-Wide Requirements

Halon Prohibitions, 40 CFR 82

29. The Permittee shall comply with the prohibitions set out in 40 CFR 82.174(b) through (d) (Protection of Stratospheric Ozone Subpart G – Significant New Alternatives Policy Program), pertaining to substitute products for ozone depleting compounds. Monitoring shall consist of an annual certification that the Permittee complies with these prohibitions.

[40 CFR 82.174 (b) - (d), 1/13/95]
[18 AAC 50.040(d), 1/18/97]

30. The Permittee shall comply with the prohibitions set out in 40 CFR 82.270(b) through (f) (Protection of Stratospheric Ozone Subpart H- Halon Emissions Reduction). Monitoring shall consist of an annual certification that the Permittee complies with these prohibitions.

[40 CFR 82.270 (b)-(f), 3/5/98]

Section 8. Insignificant Sources

This section contains the requirements that the Permittee identified under 18 AAC 50.335(q)(2) as applicable to insignificant sources at the facility. This section also specifies the testing, monitoring, recordkeeping, and reporting for insignificant sources that the Department finds necessary to ensure compliance with the applicable requirements. Insignificant sources are not exempted from any air quality control requirement or federally enforceable requirement.

As set out in 18 AAC 50.350(m), the shield of AS 46.14.290 does not apply to these sources.

31. For sources at the facility that are insignificant as defined in 18 AAC 50.335(q)-(v) that are not listed in this permit, the following apply:

31.1 The Permittee shall submit the compliance certifications of condition 64 based on reasonable inquiry;

31.2 The Permittee shall comply with the requirements of condition 44;

31.3 The Permittee shall report in the facility operating report required by condition 63 if a source listed in this condition 31, because of actual emissions less than the thresholds of 18 AAC 50.335(r), has actual emissions greater than any of those thresholds set out in 18 AAC 50.335(r).

31.4 No other monitoring, recordkeeping or reporting is required.

[18 AAC 50.346(b)(1), 5/3/02]

32. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by any of the following:

32.1 more than 20% for more than three minutes in any one hour[4],

[18 AAC 50.055(a)(1), 1/18/97, 40 CFR 52.70, 11/18/98]

32.2 more than 20% averaged over any six consecutive minutes.

[18 AAC 50.055(a)(1), 5/3/02]

33. The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.055(b)(1), 1/18/97]

34. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from an industrial process or fuel-burning equipment, to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c), 1/18/97]

[4] See Footnote 1.

Section 9. Compliance Plan

As set out in 18 AAC 50.350(k)(5), the compliance plan and schedule included in Operating Permit No. 167TVP01 do not provide the shield of AS 46.14.290 and do not prevent the Department from pursuing an enforcement action.

The following condition will bring storage tank Source ID 20 into compliance with the VOC standard contained in 40 C.F.R. 60.112a(a)(3), Subpart Ka. In this case, the subparagraph requires the operator to equip Source ID 20 with "A vapor recovery system which collects all VOC vapors and gases discharged from the storage vessel, and a vapor return or disposal system which is designed to process such VOC vapors and gases so as to reduce their emission to the atmosphere by at least 95 percent by weight."

Storage Tanks Subject to NSPS Subpart Ka

35. NSPS Subpart Ka VOC Standard. The Permittee shall install, maintain and operate Source ID 20 with a vapor recovery system meeting the specifications of 40 C.F.R. 60.112a(a)(3).

[18 AAC 50.040 (a)(2)(L), 7/2/00]
[40 C.F.R. 60.112a(a)(3), Subpart Ka, 7/1/99]
[18 AAC 50.350(k), 1/17/97]

35.1 The Permittee shall install the vapor recovery system no later than September 30, 2003.

35.2 The Permittee shall provide information as required by 40 C.F.R. 60.113a(a)(2) no later than September 30, 2003.

35.3 Every six months from the effective date of the permit, submit to the Department a certified progress report on the status of satisfying conditions 35.1 and 35.2.

35.4 Prior to installation and operation of the vapor recovery system, the Permittee shall monitor the operations of Source ID 20 in accordance with 40 C.F.R. 60.115a.

[40 C.F.R. 60.113a(a)(2), Subpart Ka, 7/1/99]
[40 C.F.R. 60.115a, Subpart Ka, 7/1/99]

Section 10. Generally Applicable Requirements

36. NESHAPs Subpart A, Applicability Determination. The Permittee shall determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories (40 CFR 63) in accordance with the procedures described in 40 CFR 63.1(b).

36.1 NESHAPS Subpart A, Recordkeeping. The Permittee shall maintain records in accordance with §63.10(b)(3).

[40 C.F.R. 63.1(b) & C.F.R. 63.10(b)(3), 7/1/99]
[18 AAC 50.040(c)(1)(A) & 50.040(c)(1)(E), 7/2/00; 18 AAC 50.350(h), 1/18/97]

37. Asbestos NESHAP. The Permittee shall comply with the requirements set forth in 40 C.F.R. 61.145 and 61.150 (Subpart M) and the applicable sections set forth in 40 C.F.R. 61, Subpart A and Appendix A.

[18 AAC 50.040(b)(3) & 50.350(d)(1), 1/18/97]
[40 C.F.R. 61, Subparts A & M, and Appendix A, 12/19/96]

38. Refrigerant Recycling and Disposal. The Permittee shall comply with the applicable standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F. Applicable requirements include 40 CFR 82.154, 82.156, 82.161, 82.162, and 82.166.

[18 AAC 50.040(d) & 50.350(d)(1), 1/18/97]
[40 C.F.R. 82, Subpart F, 7/1/97]

39. Good Air Pollution Control Practice. The Permittee shall do the following for Source ID(s) 1, 2, 6 through 9, and 13 through 19:

a. Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;

b. Keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format;

c. Keep a copy of either the manufacturer's or the operator's maintenance procedures.

[18 AAC 50.030 & 50.346(b)(2), 5/3/02 & 18 AAC 50.350(f)(2) & (3), 1/18/97]

40. Dilution. The Permittee shall not dilute emissions with air to comply with this permit. Monitoring shall consist of an annual certification that the Permittee does not dilute emissions to comply with this permit.

[18 AAC 50.045(a), 1/18/97]

41. Reasonable Precautions to Prevent Fugitive Dust. The Permittee shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air when causing or permitting bulk materials to be handled, transported, or stored, or when engaging in an industrial activity or construction project. Monitoring shall consist of an annual certification that reasonable precautions were taken.

[18 AAC 50.346(c), 5/3/02; 18 AAC 50.045(d) & 50.335(g), 1/18/97 & 18 AAC 50.040(e), 7/2/00]

42. Stack Injection. The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a source constructed or modified after November 1, 1982, unless approved in writing by the Department. Monitoring shall consist of an annual certification that the Permittee does not conduct stack injection at the facility.

[18 AAC 50.055(g), 1/18/97]

43. Open Burning. The Permittee shall conduct any open burning at the facility in accordance with the requirements of 18 AAC 50.065. Monitoring shall consist of an annual certification that any open burning complied with 18 AAC 50.065.

[18 AAC 50.040(e), 7/21/01, 18 AAC 50.065, 7/21/01, 18 AAC 50.350(d)(1), 1/18/97]

44. Air Pollution Prohibited. No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.346(a)(2), 5/3/02; 18 AAC 50.110, 5/26/72; 18 AAC 50.040(e), 7/2/00]

44.1 If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to condition 61.

44.2 As soon as practicable after becoming aware of a complaint that is attributable to emissions from the facility, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of condition 44.

44.3 The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if

a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the facility have caused or are causing a violation of condition 44; or

b. the Department notifies the Permittee that it has found a violation of condition 44.

44.4 The Permittee shall keep records of

a. the date, time, and nature of all emissions complaints received;

b. the name of the person or persons that complained, if known;

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of condition 44; and

d. any corrective actions taken or planned for complaints attributable to emissions from the facility.

44.5 With each facility operating report required under condition 63, the Permittee shall include a brief summary report which must include

a. the number of complaints received;

b. the number of times the Permittee or the Department found corrective action necessary;

c. the number of times action was taken on a complaint within 24 hours; and

d. the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.

44.6 The Permittee shall notify the Department of a complaint that is attributable to emissions from the facility within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.

[18 AAC 50.346(a)(2) & 50.350(g) - (i), 5/3/02]

45. Technology-Based Emission Standard. If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235, causes emissions in excess of a technology-based emission standard[5] , the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under condition 61 requires information on the steps taken to minimize emissions. The report required under condition 61 is adequate monitoring for compliance under this condition.

[18 AAC 50.235(a) & 50.350(f)(3), 1/18/97]

46. Permit Renewal. To renew this permit, the Permittee shall submit an application under 18 AAC 50.335 no sooner than **September 30, 2006** and no later than **September 30, 2007.**

[18 AAC 50.335(a), 1/18/97]

[5] *Technology-based emission standard* means a best available control technology standard (BACT); a lowest achievable emission rate standard (LAER); a maximum achievable control technology standard established 40 C.F.R. 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

Section 11. General Source Testing and Monitoring Requirements

47. Requested Source Tests. In addition to any source testing explicitly required by the permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements.

[18 AAC 50.220(a), 1/18/97 & 18 AAC 50.345(a) & (k), 5/3/02]

48. Operating Conditions. Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing

[18 AAC 50.220(b) & 50.350(g), 1/18/97]

48.1 at a point or points that characterize the actual discharge into the ambient air; and

48.2 at the maximum rated burning or operating capacity of the source or another rate determined by the Department to characterize the actual discharge into the ambient air.

49. Reference Test Methods. The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:

49.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60.

[18 AAC 50.220(c)(1)(A) & 50.350(g), 1/18/97 & 18 AAC 50.040(a), 7/2/00]
[40 C.F.R. 60, 7/1/99]

49.2 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 61.

[18 AAC 50.040(b), 50.220(c)(1)(B) & 50.350(g), 1/18/97]
[40 C.F.R. 61, 12/19/96]

49.3 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. 63.

[18 AAC 50.040(c), 7/2/00, 18 AAC 50.220(c)(1)(C) & 50.350(g), 1/18/97]
[40 C.F.R. 63, 7/1/99]

49.4 Source testing for reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Reference Method 9.

[18 AAC 50.030, 5/3/02, 18 AAC 50.220(c)(1)(D) & 50.350(g), 1/18/97]

49.5 Source testing for emissions of total particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60, Appendix A.

[18 AAC 50.040(a)(4), 7/2/00 & 18 AAC 50.220(c)(1)(E) & 50.350(g), 1/18/97]
[40 C.F.R. 60, Appendix A, 7/1/99]

49.6 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M, Method 201.

[`18 AAC 50.035(b)(2), 7/2/00; 18 AAC 50.220(c)(1)(F) & 50.350(g), 1/18/97]
[40 C.F.R. 51, Appendix M, 7/1/99]

49.7 Source testing for emissions of any contaminant may be determined using an alternative method approved by the Department in accordance with 40 C.F.R. 63 Appendix A, Method 301.

[18 AAC 50.040(c)(19), 7/2/00 & 18 AAC 50.220(c)(2) & 50.350(g), 1/18/97]
[40 C.F.R. 63, Appendix A, Method 301, 7/1/99]

50. Excess Air Requirements. To determine compliance with this permit, standard exhaust gas volumes must include only the volume of gases formed from the theoretical combustion of the fuel, plus the excess air volume normal for the specific source type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.220(c)(3), 18 AAC 50.350(g), 1/18/97 & 18 AAC 50.990(88), 5/3/02]

51. Test Exemption. The Permittee is not required to comply with conditions 53, 54 and 55 when the exhaust is observed for visible emissions.

[18 AAC 50.345(a), 5/3/02]

52. Test Deadline Extension. The Permittee may request an extension to a source test deadline established by the Department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the Department's appropriate division director or designee.

[18 AAC 50.345(a) & (l), 5/3/02]

53. Test Plans. Except as provided in condition 51, before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the source will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under condition 47 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.

[18 AAC 50.345(a) & (m), 5/3/02]

54. Test Notification. Except as provided in condition 51, at least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and the time the source test will begin.

[18 AAC 50.345(a) & (n), 5/3/02]

55. Test Reports. Except as provided in condition 51, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in condition 57. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

[18 AAC 50.345(a) & (o), 5/3/02]

56. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in conditions 4 and 33, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f) & 50.350(g), 1/18/97]

Section 12. General Recordkeeping, Reporting, and Compliance Certification Requirements

57. Certification. The Permittee shall certify all reports, compliance certifications, or other documents submitted to the Department and required under the permit by including the signature of a responsible official for the permitted facility following the statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete." Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal. When certifying a compliance certification, the official's signature must be notarized.

[18 AAC 50.205 and 50.350(b)(3) & (j), 1/18/97; and 18 AAC 50.345(a) & (j), 5/3/02]

58. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall send reports, compliance certifications, and other documents required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician.

[18 AAC 50.350(i), 1/18/97]

59. Information Requests. The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by the permit. The Department may require the Permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.200 & 50.350(b)(3), 1/18/97; and 18 AAC 50.345(a) & (i) & 50.350(g) – (i), 5/3/02]

60. Recordkeeping Requirements. The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:

[18 AAC 50.350(h), 5/3/02]
[40 C.F.R. 60.7(f) Subpart A, 7/1/99]

60.1 copies of all reports and certifications submitted pursuant to this section of the permit; and

60.2 records of all monitoring required by this permit, and information about the monitoring including:

a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;

b. sampling dates and times of sampling or measurements;

c. the operating conditions that existed at the time of sampling or measurement;

d. the date analyses were performed;

e. the location where samples were taken;

f. the company or entity that performed the sampling and analyses;

g. the analytical techniques or methods used in the analyses; and

h. the results of the analyses.

61. Excess Emissions and Permit Deviation Reports.

61.1 Except as provided in condition 44, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report

(i) emissions that present a potential threat to human health or safety; and

(ii) excess emissions that the Permittee believes to be unavoidable;

b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology based emission standard;

c. report all other excess emissions and permit deviations

(i) within 30 days of the end of the month in which the emissions or deviation occurs or is discovered, except as provided in conditions 61.1c(ii) and 61.1c(iii);

(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under condition 61.1c(i); and

(iii) for failure to monitor, as required in other applicable conditions of this permit.

61.2 When reporting excess emissions, the Permittee must report using either the Department's on-line form, which can be found at www.state.ak.us/dec/dawq/aqm/eeform.pdf, or, if the Permittee prefers, the form contained in Section 18 of this permit. The Permittee must provide all information called for by the form that is used.

61.3 When reporting a permit deviation, the Permittee must report using the form contained in Section 18 of this permit. The Permittee must provide all information called for by the form.

61.4 If requested by the Department, the Permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

[18 AAC 50.235(a)(2), 50.240(c), & 50.350(i), 1/18/97; and 18 AAC 50.346(a)(3), 5/3/02

62. NSPS and NESHAP Reports. The Permittee shall:

[18 AAC 50.040 & 50.350(i)(2), 1/18/97; and 40 C.F.R. 60 & 61, 7/1/99]

62.1 attach to the facility operating report required by condition 63, copies of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10 unless copies have already been provided to the Department at the time submitted to EPA, and

62.2 upon request by the Department provide a copy of any EPA-granted waiver of the federal emission standards, record keeping, monitoring, performance testing, or reporting requirements, or approved custom monitoring schedules.

63. Operating Reports. During the life of this permit, the Permittee shall submit to the Department an original and two copies of an operating report by April 30 for the period January 1 to March 31, by July 30 for the period April 1 to June 30, by October 30 for the period July 1 to September 30, and by February 14 for the period October 1 to December 31 of the previous year.

63.1 The operating report must include all information required to be in operating reports by other conditions of this permit.

63.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under condition 63.1, either

a. The Permittee shall identify

(i) the date of the deviation;

(ii) the equipment involved;

(iii) the permit condition affected;

(iv) a description of the excess emissions or permit deviation; and

(v) any corrective action or preventive measures taken and the date of such actions; or

b. When excess emissions or permit deviations have already been reported under condition 61 the Permittee may cite the date or dates of those reports.

63.3 The operating report must include a listing of emissions monitored under condition 22 which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report

a. the date that additional monitoring or testing was triggered;

b. the equipment involved;

c. the permit condition affected; and

d. the monitoring result which triggered the additional monitoring.

[18 AAC 50.346(b)(3), 5/3/02; 18 AAC 50.350(d)(4), 6/21/98; and 18 AAC 50.350(f)(3) & (i), 1/18/97]

64. Annual Compliance Certification. Each year by March 31, and for reporting periods following the effective date of this permit the Permittee shall compile and submit to the Department an original and two copies of an annual compliance certification report as follows:

[18 AAC 50.350(j), 1/18/97]

64.1 For each permit term and condition set forth in Section 4 through Section 12, including terms and conditions for monitoring, reporting, and recordkeeping:

[18 AAC 50.350(d)(4), 6/21/98]

a. certify the compliance status over the preceding calendar year consistent with the monitoring required by this permit;

b. state whether compliance is intermittent or continuous;

c. briefly describe each method used to determine the compliance status; and

d. notarize the responsible official's signature.

[18 AAC 50.205, 1/18/97 & 50.345(a) & (j), 5/3/02]

64.2 In addition, submit a copy of the report directly to the EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

[18 AAC 50.350(j), 1/18/97]

Section 13. Standard Conditions Not Otherwise Included in the Permit

65. The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for

65.1 an enforcement action;

65.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or

65.3 denial of an operating-permit renewal application.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (c), 5/3/02]

66. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (d), 5/3/02]

67. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (e), 5/3/02]

68. Compliance with permit terms and conditions is considered to be compliance with those requirements that are

68.1 included and specifically identified in the permit; or

68.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (b), 5/3/02]

69. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (f), 5/3/02]

70. The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (g), 5/3/02]

71. The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to

71.1 enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;

71.2 have access to and copy any records required by the permit;

71.3 inspect any facility, equipment, practices, or operations regulated by or referenced in the permit; and

71.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (h), 5/3/02]

Section 14. Permit As Shield from Inapplicable Requirements

In accordance with AS 46.14.290, and based on information supplied in the facility application, this section of the permit contains the requirements determined by the Department not to be applicable to the **Flow Station #1**.

Table 4 identifies the sources that are not subject to the specified requirements at the time of permit issuance. Some of the requirements listed below may become applicable during the permit term due to an invoking event, even though the requirement is deemed inapplicable at the time of permit issuance.

72. If any of the requirements listed in Table 4 become applicable during the permit term, the Permittee shall comply with such requirements on a timely basis. The Permittee shall also provide appropriate notification to EPA, and apply for a construction permit or an operating permit revision, if necessary.

Table 4 - Permit Shields Granted.

Shield requested for:	Reason for shield decision:
All Gas-Fired Heaters	
40 CFR 60 Subpart D -Standards of Performance for Fossil-Fuel-Fired Steam Generators	Heat input capacities below threshold (250 MMBtu/hr); and units not classified as *Fossil-Fuel-Fired Steam Generators,* as defined in subpart.
40 CFR 60 Subpart Da -Standards of Performance for Electric Utility Steam Generating Units	Heat input capacities below threshold (250 MMBtu/hr); and units not classified as *Electric Utility Steam Generating Units,* as defined in subpart.
40 CFR 60 Subpart Db -Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	Heat input capacities below threshold (100 MMBtu/hr).
Gas–Fired Heaters NGH-15-2801 and NGH-15-2811	
40 CFR 60 Subpart Dc – Standards of Performance for Small Industrial – Commercial – Institutional Steam Generating Units	Heat input capacities below threshold (10 MMBtu/hr).
Gas-Fired Heaters NGH-15-1431, NGH-15-1481, NGH-15-1433, and NGH-15-1491	
40 CFR 60 Subpart Dc	Commenced construction prior to effective date of subpart (6/9/89).

Shield requested for:	Reason for shield decision:
Gas-Fired Heaters NGH-15-1495, NGH-15-1496, and NGH-15-14001	
40 CFR 60 Subpart Dc – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units §60.42c – Standard for Sulfur Dioxide (SO_2)	Standards for SO_2 and PM and related performance test, monitoring, and reporting requirements not applicable for affected facility fired on fuel gas.
§60.43c – Standard for Particulate Matter	
§60.44c – Compliance and Performance Tests Methods and Procedures for SO_2 40 CFR 60 Subpart A – General Provisions §60.8 – Performance Test	
§60.45c – Compliance and Performance Tests Methods and Procedures for PM §60.8 – Performance Test	
§60.46c – Emission Monitoring for SO_2	
§60.47c – Emission Monitoring for PM	
§60.48c(a)(4)-(f) & (h) – Reporting and Recordkeeping Reqiuirements	
§60.48c(a)(2)-(3) - Reporting and Recordkeeping Requirements	Facility is not subject to any requirements that limit the annual capacity factor for any fuel or mixture of fuels. Facility fires only fuel gas.
40 CFR 60 Subpart A – General Provisions §60.7(a)(1), (2) & (3) – Initial Notification 40 CFR 60 Subpart Dc §60.48c(a)(1) – Notifications	Obsolete requirements – completed as required.
§60.7(a)(4) – Notification and Recordkeeping	This requirement only applies to "existing facilities", as defined in 40 CFR 60.2.
§60.7(c) & (d) – Excess Emission Reporting 40 CFR 60 Subpart Dc	The provisions of §60.7(c) & (d) apply only to New Source Performance Standards which require the installation of a continuous monitoring system (CMS) or monitoring device, as defined in §60.2. BP is not required to install a CMS or monitoring device per Subpart Dc.
Storage Tanks 15-1900-10, 15-1932, 15-1933, 15-1934, 15-1935, 15-1937, and 15-1938	
40 CFR 60 Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids	Vessel not storing a *petroleum liquid,* as defined in subpart; and/or vessel storage capacity below thresholds (40,000 gallons); and/or vapor pressure of stored liquid below thresholds; and/or storage prior to custody transfer; and/or commenced construction after the effective date of subpart (5/19/78), depending upon tank.

Shield requested for:	Reason for shield decision:
40 CFR 60 Subpart Ka – Standards of Performance for Storage Vessels of Petroleum Liquids	Vessel not storing a *petroleum liquid,* as defined in subpart; and/or vessel storage capacity below thresholds (40,000/420,000 gallons); and/or vapor pressure of stored liquid below thresholds; and/or storage prior to custody transfer; and/or commenced construction prior to or after the effective dates of subpart (5/18/78--7/23/84), depending upon tank.
40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)	Vessel not storing a volatile organic liquid (VOL) or *petroleum liquid,* as defined in subpart; and/or vessel storage capacity below thresholds; and/or vapor pressure of stored liquid below thresholds; and/or storage prior to custody transfer; and/or commenced construction prior to or after the effective date of subpart (7/23/84), depending upon tank.
Storage Tank: 15-1951	
Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids	Subpart K does not apply to tanks constructed prior to May 18, 1978. This tank commenced construction in 1981.
40 CFR 60 Subpart A – General Provisions §60.7(a)(1), (2) & (3) – Notification and Recordkeeping (Initial Notification)	Obsolete requirements – completed as required.
§60.7(a)(4) - Notification and Recordkeeping	This requirement only applies to "existing facilities," as defined in 40 CFR 60.2.
§60.7(c) & (d) – Excess Emission Reporting for 40 CFR 60 Subpart Ka	The provisions of §60.7(c) & (d) apply only to NSPS which require the installation of a continuous monitoring system (CMS) or monitoring device, as defined in §60.2; BPXA is not required to install a CMS or monitoring device per Subpart Ka.
§60.8 – Performance Tests for 40 CFR 60 Subpart Ka	There are no performance test requirements for closed vent systems.
§60.18 – General Control Device Requirements for 40 CFR 60 Subpart Ka	40 CFR 60.18 only applies to "facilities covered by subparts referring to this section" [ref. §60.18(a)]; Subpart Ka does not reference §60.18.
40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)	Subpart Kb applies to tanks constructed after July 23, 1984. This tank commenced construction in 1981.

Shield requested for:	Reason for shield decision:
40 CFR 64 – Compliance Assurance Monitoring	Emissions from this tank are less than 100 tpy VOC. Only sources with pre-control device emissions greater than 100 tpy are affected by 40 CFR 64 [ref. 40 CFR 64.2(a)].
Gas-Fired Turbines NGT-15-1801 and NGT-15-1802	
40 CFR 60 Subpart GG – Standards of Performance for Stationary Gas Turbines	Commenced construction prior to effective date of subpart (10/3/77). No "modification" occurred as a result of Circamet Can replacement of these turbines; source testing inconclusive regarding an increase in emission rates.
Gas-Fired Turbine NGT-15-15107	
40 CFR 60 Subpart GG §60.332 - Standards for NO_x 40 CFR 60 Subpart A -General Provisions §60.8(a) – Performance Tests (NO_x)	Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hr) but less than or equal to 107.2 gigajoules per hour based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from §60.332 [§60.332(e)].
Gas-Fired Turbines NGT-15-1803 and NGT-15-1804	
40 CFR 60 Subpart GG -Standards of Performance for Stationary Gas Turbines §60.332(a)(1) - Standards for NO_x	Standard applies to *Electric Utility Stationary Gas Turbines,* as defined in subpart. Source is not an Electric Utility Stationary Gas Turbine as defined in Subpart GG.
Gas-Fired Turbines NGT-15-1803, NGT-15-1804, and NGT-15-15107	
40 CFR 60 Subpart GG §60.334(a) – Monitoring of Operations §60.335(c)(2) – Test Methods and Procedures	Applies only to affected turbines equipped with water injection to control emissions of NO_x. Source is not equipped with water injection to control emissions of NO_x.
40 CFR 60 Subpart GG §60.334(b) -Monitoring of Operations (Fuel Nitrogen Only) §60.335(a) - Test Methods and Procedures	EPA Region X waived fuel bound nitrogen monitoring for NSPS affected stationary gas turbines operated by BPX (ref. correspondence dated August 19, 1996.)
40 CFR 60 Subpart A -General Provisions §60.7(a)(1), (2) & (3) -Notification and Recordkeeping (Initial Notification) §60.8(a) –Performance Test, (Initial Performance Test Only) 40 CFR Subpart GG §60.335(b), (c)(l), (c)(3) - Test Methods and Procedures	Obsolete requirements - completed as required.
§60.7(a)(4) -Notification and Recordkeeping	This requirement only applies to "existing facilities", as defined in 40 CFR 60.2.

Shield requested for:	Reason for shield decision:
All Flares	
40 CFR 60 Subpart A – General Provisions §60.18 – General Control Device Requirements	The flares are not control devices used to comply with applicable Subparts of 40 CFR 60 and 40 CFR 61.
Facility-Wide	
18 AAC 50.201 – Ambient Air Quality Investigation	This requirement is not applicable until such time as the Department requests an ambient air quality investigation.
40 CFR 60 Subpart J -Standards of Performance for Petroleum Refineries 40 CFR 60 Subpart GGG -Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries 40 CFR 60 Subpart QQQ - Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems.	Facility does not meet the definition for a petroleum refinery.
40 CFR 60 Subpart KKK - Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants products.	Facility is not a natural gas processing plant as defined in subpart.
40 CFR 60 Subpart LLL – Standards of Performance for Onshore Natural Gas Processing Plants: SO_2 Emissions	Facility does not operate *natural gas sweetening unit(s).*
40 CFR 61 Subpart A - General Provisions	Requirements only apply to sources subject to any provision of 40 CFR 61.
40 CFR 61 Subpart J - National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene	No process components in *benzene service,* as defined by subpart (10 percent benzene by weight).
40 CFR 61 Subpart M - National Emission Standard for Asbestos §61.142 - Standard for Asbestos Mills	Facility is not an Asbestos Mill.
§61.143 - Standards for Roadways	Facility roadways not exposed to asbestos tailings or asbestos containing waste.
§61.144 - Standard for Manufacturing	Facility does not engage in any manufacturing operations using commercial asbestos.
§61.146 - Standard for Spraying	Facility does not spray apply asbestos containing materials.
§61.147 - Standard for Fabricating	Facility does not engage in any fabricating operations using commercial asbestos.
§61.148 - Standard for Insulating Materials	Facility does not install or reinstall, on any facility component, insulation material containing commercial asbestos.
§61.149 - Standard for Waste Disposal for Asbestos Mills	Applies only to those facilities subject to §61.142 (Asbestos Mills).
§61.151 - Standard for Inactive Waste Disposal	Applies only to those facilities subject to

Shield requested for:	Reason for shield decision:
Sites for Asbestos Mills and Manufacturing and Fabricating Operations	§§61.142, 61.144, or 61.147 (Asbestos Mills, manufacturing or fabricating).
§61.152 - Standard for Air-Cleaning	Facility does not use air cleaning equipment.
§61.153 - Standard for Reporting	No reporting requirements apply for sources subject to §61.145 (demolition and renovation) [ref. §61.153(a)].
§61.154 - Standards for Active Waste Disposal Sites	Facility not an active waste disposal site and does not receive asbestos containing waste material.
§61.155 - Standard for Inactive Waste Disposal Sites for Asbestos Mills and Manufacturing and Fabricating Operations	Facility does not process regulated asbestos containing material (RACM).
Activities subject to 40 CFR 61 Subpart M – Standard for Demolition and Renovation (§61.145)	
40 CFR 61 Subpart A - General Provisions §61.05(a) - Prohibited Activities §61.07 - Application for Approval of Construction or Modification §61.09 -Notification of Startup	Owners or operators of demolition and renovation operations are exempt from the requirements of §§61.05(a), 61.07, and 61.09 [ref. 40 CFR 61. 145(a)(5)].
§61.10 - Source Reporting and Waiver Request	Demolition and renovation operations are exempt from §61.10(a) [ref. 40 CFR 61. 153(b)].
§61.13 -Emission Tests §61.14 - Monitoring Requirements	Emission tests or monitoring is not required under the standards for demolition and renovation [§61.145].
Facility-Wide	
40 CFR 61 Subpart V - National Emission Standard for Equipment Leaks (Fugitive Emission Sources)	Facility does not operate equipment in volatile hazardous air pollutant (VHAP) service (>10 percent VHAP by weight).
40 CFR 61 Subpart Y - National Emission Standard for Benzene Emissions from Benzene storage vessels	Facility does not operate storage vessels in benzene service.
40 CFR 61 Subpart BB -National Emission Standard Benzene Emissions from Benzene Transfer Operations	Facility does not conduct benzene transfer operations.
40 CFR 61 Subpart FF - National Emission Standard for Benzene Waste Operations	Facility does not conduct benzene waste operations.
40 CFR 63 Subpart A - General Provisions, except §63.1(b) and §63.10(b)(3)	Requirements only apply to sources subject to any provision of 40 CFR 63. This facility is not subject to 40 CFR 63 Subpart A, except for the requirement to determine rule applicability (§63.1(b)) and to keep records of rule applicability determination (§63.10(b)(3)).
40 CFR 63 Subpart B – Requirements for	Facility is not a major source of HAPs.

Shield requested for:	Reason for shield decision:
Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections 112(g) and 112(j).	
40 CFR 63 Subpart T - National Emission Standards for Halogenated Solvent Cleaning	Facility does not operate halogenated solvent cleaning machines.
40 CFR 63 Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries	Facility does not meet the definition for a petroleum refinery.
40 CFR 63 Subpart HH – National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities	Facility qualifies for the "black oil exemption" and facility is not a major source of HAPs.
40 CFR 63 Subpart HHH – National Emission Standards for Hazardous Air Pollutants for Natural Gas Transmission and Storage Facilities	Facility is considered part of the oil and natural gas production source category (Subpart HH) and not part of the natural gas transmission and storage category (Subpart HHH) because it transports natural gas prior to the point of custody transfer where operations may be affected by Subpart HHH.
40 CFR 63 Subpart EEEE – National Emission Standards for Organic Liquid Distribution	The facility is not a major source of HAPs.
40 CFR 64 – Compliance Assurance Monitoring [All units except Overflow/Dirty Water Tank (15-1951)]	Does not use a control device to achieve compliance with any emission limitation or standard.
40 CFR 68 - Accidental Release Prevention Requirements: Risk Management Programs [§ 112(r)]	"Naturally occurring hydrocarbon mixtures" (crude oil, condensate, natural gas and produced water), prior to entry into a petroleum refining process unit (NAICS code 32411) or a natural gas processing plant (NAICS code 211112) are exempt from the threshold determination. (See Final Rule exempting from threshold determination regulated flammable substances in naturally occurring hydrocarbon mixtures prior to initial processing, 63 FR 640 [January 6, 1998]). Less than 10,000 lbs of other mixtures containing regulated flammable substances that meet the criteria for an NFPA rating of 4 for flammability are stored at the facility. Therefore, FS#1, a crude petroleum and natural gas production facility, (NAICS code 211111) does not process or store regulated flammable or toxic substances in excess of threshold quantities.
40 CFR 82.1 Subpart A - Production and Consumption Controls	Facility does not produce, transform, destroy, import or export Class l or Group I or II

Shield requested for:	Reason for shield decision:
	substances or products.
40 CFR 82.30 Subpart B - Servicing of Motor Vehicle Air Conditioners	Facility does not service motor vehicle air conditioners.
40 CFR 82.60 Subpart C -Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances	Facility is not a manufacturer or distributor of Class I and II products or substances.
40 CFR 82.80 Subpart D – Federal Procurement	Subpart applies only to Federal departments, agencies, and instrumentalities.
40 CFR 82.100 Subpart E- The Labeling of Products Using Ozone-Depleting Substances.	Facility is not a manufacturer or distributor of Class I and II products or substances.
40 CFR 82.158 Subpart F - Recycling and Emissions Reduction.	Facility does not manufacture or import recovery and recycling equipment.
40 CFR 82.160- Approved Equipment Testing Organizations	Facility does not contract equipment testing organizations to certify recovery and recycling equipment.
40 CFR 82.164 –Reclaimer Certification	Facility does not sell reclaimed refrigerant.
40 CFR 82, Subpart F, Appendix C - Method for Testing Recovery Devices for Use With Small Appliances	Facility is not a third party entity that certifies recovery equipment.
40 CFR 82, Subpart F, Appendix D - Standards for Becoming a Certifying Program for Technicians	Facility does not have a technician certification program.
40 CFR 82. 174(a) Subpart G - Significant New Alternatives Policy Program: Prohibitions	Facility does not manufacture substitute chemicals or products for ozone- depleting compounds.
40 CFR 82.270(a) Subpart H - Halon Emissions Reduction	Facility does not manufacture halon.
All Storage Tanks	
40 CFR 63 Subpart OO - National Emission Standards for Tanks - Level 1	Provisions only apply to tanks affected by 40 CFR 60, 61, or 63 that specifically reference 40 CFR 63 Subpart OO.
40 CFR 63 Subpart SS – National Emission Standards for Closed Vent Systems	Provisions only apply to tanks affected by 40 CFR 60, 61, or 63 that specifically reference 40 CFR 63 Subpart SS.
Drain Systems	
40 CFR 63 Subpart RR - National Emission Standards for Individual Drain Systems	Provisions only apply to drain systems affected by 40 CFR 60, 61, or 63 that specifically reference 40 CFR 63 Subpart RR.
Oil-Water Separators	
40 CFR 63 Subpart VV -National Emission Standards for Oil-Water Separators and Organic-Water Separators	Provisions only apply to oil-water separators and organic-water separators affected by 40 CFR 60, 61, or 63 that specifically reference 40 CFR 63 Subpart VV.

[18 AAC 50.350(l), 1/18/97]

Section 15. Visible Emissions Forms

Visible Emissions Field Data Sheet

Certified Observer: _____

Company: _____

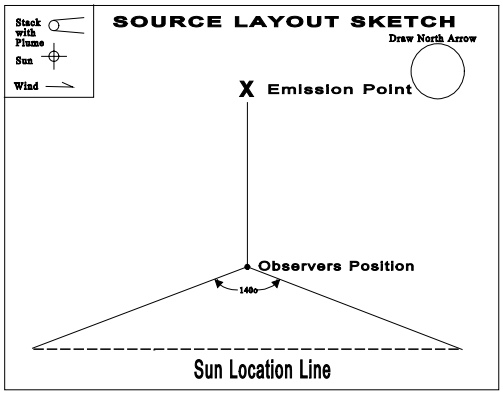
Location: _____

Test No.: _____ Date: _____

Source: _____

Operating Rate: _____

_____



Clock Time	Initial				Final
Observer location Distance to discharge					
Direction from discharge					
Height of observer point					
Background description					
Weather conditions Wind Direction					
Wind speed					
Ambient Temperature					
Relative humidity					
Sky conditions: (clear, overcast, % clouds, etc.)					
Plume description: Color					
Distance visible					
Water droplet plume? (Attached or detached?)					
Other information					

Visible Emissions Observation Record

Page ___ of ___

Company _____ Certified Observer_____

Test Number _____ Clock time_____

Date:		Visibility reduction every 15 Seconds (Opacity)				Steam Plume (check if applicable)		Comments
Hr	Min	0	15	30	45	Attached	Detached	

Additional information:

_____
Observer Signature

Data Reduction:
Duration of Observation Period (minutes) _____
Number of Observations _____
Number of Observations exceeding 20% _____

Average Opacity Summary

Set Number	Time Start—End	Opacity	
		Sum	Average

Section 16. SO_2 Material Balance Calculation

If a fuel shipment contains more than 0.75 percent sulfur by weight, calculate the three-hour exhaust concentration of SO_2 using the following equations:

A = 31,200 x [wt%S_{fuel}] = 31,200 x _____ = _____

B = 0.148 x [wt%S_{fuel}] = 0.148 x _____ = _____

C = 0.396 x [wt%C_{fuel}] = 0.396 x _____ = _____

D = 0.933 x [wt%H_{fuel}] = 0.933 x _____ = _____

E = B + C + D = _____ + _____ + _____ = _____

F = 20.9 − [vol%$_{dry}O_{2,\ exhaust}$] = 20.9 − _____ = _____

G = [vol%$_{dry}O_{2,\ exhaust}$] ÷ F = _____ ÷ _____ = _____

H = 1 + G = 1 + _____ = _____

I = E x H = _____ x _____ = _____

SO_2 concentration = A ÷ I = _____ ÷ _____ = _____ ppm

The wt%S_{fuel}, wt%C_{fuel}, and wt%H_{fuel} are equal to the weight percents of sulfur, carbon, and hydrogen in the fuel. These percentages should total 100%.

The fuel weight percent (wt%) of sulfur is obtained pursuant to condition XI.2. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust (vol%$_{dry}O_{2,\ exhaust}$) is obtained from oxygen meters, manufacturer's data, or from the most recent analysis under 40 C.F.R. 60, Appendix A-2, Method 3, adopted by reference in 18 AAC 50.040(a), at the same engine load used in the calculation.

Enter all of the data in percentages without dividing the percentages by 100. For example, if **wt%S_{fuel}** = 1.0%, then enter 1.0 into the equations, not 0.01, and if **vol%$_{dry}O_{2,\ exhaust}$** = 3.00%, then enter 3.00, not 0.03.

[18 AAC 50.346(c), 5/3/02]

Section 17. Emission Factors

Table 5 – Emission Factors.

Equipment	NO_X	CO	PM
Gas Turbines, Source ID(s) 3 through 5	**Allowable concentration or representative source test data if less than allowable concentration**	**0.082 lb/MMBtu (AP-42)**	**0.014 lb/MMBtu (allowable)**

Section 18. ADEC Notification Form

Fax this form to: (907) 269-7508 Telephone: (907) 269-8888

BP Exploration (Alaska) Inc.
Company Name

Flow Station #1
Facility Name

Reason for notification:

❑ **Excess Emissions**
If you checked this box
Fill out section 1

❑ **Other Deviation from Permit Condition**
If you checked this box
fill out section 2

When did you discover the Excess Emissions or Other Deviation:
Date:__/__/__ Time:__:__

Section 1. Excess Emissions

(a) Event Information (Use 24-hour clock)**:**

	START Time**:** (hr:min):	**END** Time:	**Duration**
Date: _____	_____:_____	_____:_____	_____:_____
Date: _____	_____:_____	_____:_____	_____:_____
		Total:	_____:_____

(b) Cause of Event (Check all that apply)**:**

❑ START UP ❑ UPSET CONDITION ❑ CONTROL EQUIPMENT
❑ SHUT DOWN ❑ SCHEDULED MAINTENANCE ❑ OTHER _____

Attach a detailed description of what happened, including the parameters or operating conditions exceeded.

(c) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____

(d) Emission Limit Potentially Exceeded

Identify each emission standard potentially exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Identify what observation or data prompted this report. Attach additional sheets as necessary.

Permit Condition	Limit	Emissions Observed
_____	_____	_____
_____	_____	_____

(e) Excess Emission Reduction:

Attach a description of the measures taken to minimize and/or control emissions during the event.

(f) Corrective Actions:

Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence.

(g) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable?
❑ YES ❑ NO
Do you intend to assert the affirmative defense of 18 AAC 50.235?
❑ YES ❑ NO

Section 2. Other Permit Deviations

(a) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device

(b) Permit Condition Deviation:

Identify each permit condition deviation or potential deviation. Attach additional sheets as necessary.

Permit Condition	Potential Deviation

(c) Corrective Actions:

Attach a description of actions taken to correct the deviation or potential deviation and to prevent recurrence.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: Signature: Date:

Alaska Department of Environmental Conservation

Air Permits Program

December 13, 2002

BP Exploration (Alaska) Inc.

Flow Station #1

STATEMENT OF BASIS

of the terms and conditions for

Permit No. 167TVP01

Prepared by Robert Dolan

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating/Construction Permit No. 167TVP01.

FACILITY IDENTIFICATION

Section 1 of Operating/Construction Permit No. 167TVP01 contains information on the facility as provided in the Title V permit application.

The facility is operated by BP Exploration (Alaska) Inc., and BP Exploration (Alaska) Inc. is the Permittee for the facility's operating/construction permit. The SIC code for this facility is 1311. The NAICS code of this facility is 211111.

The facility receives three-phase crude oil from the surrounding production pads where it is separated into crude oil for sale, produced water for reinjection, and natural gas for use as fuel and for reinjection.

SOURCE INVENTORY AND DESCRIPTION

Table 1 of Operating/Construction Permit No. 167TVP01 contains information on the sources regulated by this permit as provided in the application. The table is provided for informational and identification purposes only. Specifically, the source rating/size provided in the table does not create an enforceable limit.

EMISSIONS

Section 2 of Operating/Construction Permit No. 167TVP01 contains emission information as provided in the Title V application. A summary of the potential to emit (PTE)[6] and assessable PTE as indicated in the application from the Flow Station #1 is shown in the table below.

Table A - Emissions Summary, in Tons Per Year (TPY)

Pollutant	NO_X	CO	PM-10	SO_2	VOC	HAPS	Total
PTE	2872	889	84	35	30	18	3928
Assessable PTE	2872	889	84	35	30	0	3910

The assessable PTE listed under condition 1.1 is the sum of the emissions of each individual regulated air contaminant for which the facility has the potential to emit quantities greater than

[6] *Potential to Emit or PTE* means the maximum quantity of a release of an air contaminant, considering a facility's physical or operational design, based on continual operation of all sources within the facility for 24 hours a day, 365 days a year, reduced by the effect of pollution control equipment and approved state or federal limitations on the capacity of the facility's sources or the facility to emit an air contaminant, including limitations such as restrictions on hours or rates of operation and type or amount of material combusted, stored, or processed...as defined in AS 46.14.990(21), effective 1/18/97.

10 TPY. For the gas-fired sources, essentially all the HAP emissions are VOC, so the HAP emissions cannot be included in the total billable emissions.

For criteria pollutants, emissions are as provided in supplemental data to the permit application, dated August 30, 2002.

The facility is not a HAPs major facility. The HAP emissions calculated by BPXA are less than the 18 AAC 50.300(f) trigger of 10/25 TPY. BPXA used GRI-HAPCalc v3.01 to estimate HAP emissions from the fuel gas-fired sources at FS-1. GRI-HAPCalc was run using the most conservative factors (EPA) and AP-42 emission factors were used for liquid fuel-fired sources (assuming a 200 hours pf operation per year for each emergency engine). Emission factors from the database available from the Ventura County Air Pollution Control District (VCAPCD) were used to estimate flare emissions. Finally, HAPs emissions from tank tag no. 15-1951 were estimated using Tanks v4.09. BPXA's results indicate total facility-wide aggregate HAP emissions of 18 TPY and a maximum single HAP (n-hexane) emission rate of 4.0 TPY. Estimates for diesel-fired equipment add only approximately 0.004 TPY to the aggregate total, so the engines would have to operate much more than 200 hours per year to make any significant difference in the facility total HAP emissions. Total aggregated HAP emissions from tank tag no. 15-1951 are less than 1 TPY.

BASIS FOR REQUIRING AN OPERATING PERMIT

Section 2 of Operating/Construction Permit No. 167TVP01 lists the regulatory classifications of the Flow Station #1. This facility is classified as a Prevention of Significant Deterioration (PSD) Major Facility as defined in 18 AAC 50.300 (c)(1) and (f), because it has the potential to emit 250 tpy of a regulated air contaminant in an area designated attainment or unclassifiable for that air contaminant under 18 AAC 50.015. This facility is also classified as having the potential to violate one or more of the ambient air quality standards under 18 AAC 50.300(b)(2) because it contains a fuel-burning equipment with a rated capacity of 100 MMBtu per hour or more. This facility requires an operating permit under 18 AAC 50.325(b)(1 & 3) because it has the potential to emit more than 100 tpy of a regulated air contaminant and has source(s) subject to new source performance standards.

Alaska regulations require operating permit applications to include identification of "regulated sources." As applied to Flow Station #1, the state regulations require a description of:

⇒ Each source regulated by a standard in 18 AAC 50.055, Industrial Processes and Fuel Burning Equipment, under18 AAC 50.335(e)(4)(C);

⇒ Each source subject to a standard adopted by reference in 18 AAC 50.040 under 18 AAC 50.335(e)(2); and

⇒ Sources subject to requirements in an existing Department permit 18 AAC 50.335(e)(5).

The emission sources at Flow Station #1 classified as "regulated sources" according to the above Department regulations are listed in Table 1 of Operating/Construction Permit No. 167TVP01.

CURRENT AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

The most recent permit issued for this facility is permit-to-operate number 9273-AA017. This permit-to-operate included all construction authorizations issued through December 20, 1996, since it was issued before January 18, 1997. In addition, EPA Prevention of Significant Deterioration (PSD) permit number PSD-X80-09, as amended through August 29, 1997 contains specific BACT requirements for the facility. All facility-specific requirements established in this previous permit are included in the new operating permit as described in Table B.

Construction Permits

No construction permits have been issued for this facility after January 18, 1997 (the effective date of the new divided operating and construction-permitting program).

Title V Operating Permit Application History

The owner or operator submitted an application on November 20, 1997.

The owner or operator amended this application on January 20, 1998, April 28, 1998, and June 18, 1999.

Additional information was received August 30, 2002.

COMPLIANCE HISTORY

The facility has operated at its current location since 1977. Review of the permit files for this facility, which includes the past inspection reports indicate a facility generally operating in compliance with its operating permit.

FACILITY-SPECIFIC REQUIREMENTS CARRIED FORWARD

State of Alaska regulations in 18 AAC 50.350(d)(1)(D) require that an operating permit include each facility-specific requirement established in a prior construction permit. Table B below lists the permit condition that established a requirement in Operating/Construction Permit No. 9273-AA017 and the new condition in Operating Permit No. 167TVP01 that carries the old requirement into the new permit.

Table B - Comparison of Pre-January 18, 1997 Permit No. 9273-AA017 (12/20/96 amendment) Conditions to Operating/Construction Permit No. 167TVP01 Conditions[7]

Permit No. 9273-AA017 condition	Description of Requirement	Permit No. 167TVP01 condition	How condition was revised
3	Permittee shall comply with the most stringent of applicable emission standards	6 and 7	These limitations have been carried in a simpler format based on revised EPA PSD permit PSD-

[7] This table does not include all standard and general conditions

Permit No. 9273-AA017 condition	Description of Requirement	Permit No. 167TVP01 condition	How condition was revised
	and specifications set out in….and Exhibit B		X80-09. The revisions involve the apportionment of either field-wide or facility-wide tpy limits with unit-specific limits. Emission rates have been eliminated since they are not limits. No increase in emissions.
5	Permittee shall conduct a monthly test of the fuel gas to determine the sulfur (H_2S) content of the gas burned in the turbines and heaters.	21.1	No change
6 and Exhibit D	Permittee shall calculate the total quantity of sulfur dioxide from the facility each month and report the result in the facility operating report.	None	Condition has been deleted. Reason for original permit condition is no longer valid. Potential increase of fuel gas sulfur content not considered a PSD modification.
7 and Exhibit C	Permittee shall install, maintain, and operate a continuous monitoring system, as described in Exhibit C, to measure or estimate fuel consumption by the turbines and heaters. For other sources the fuel consumption may be estimated.	8	No change.
14	Permittee shall maintain, monitoring…. for not less than one year, and….accessible to the Department for not less than three years.	60	Record retention is now five years per regulation. Standard condition.
Exhibit D, Item 3	Permittee shall include the number of hours of operation for each source for each month	9	No change, except no longer required for flares.
Exhibit C	Monitor flue gas O_2 for process heaters > 43 MMBtu/hr	11	No change.

REVISIONS MADE TO AIR QUALITY PERMIT-TO-OPERATE 9273-AA017

BP Exploration (Alaska) Inc. (BPXA) has submitted a construction permit application under provisions of 18 AAC 50.305(a)(3) requesting modifications of the terms and conditions of

former Operating Permit 9273-AA017. BPXA submitted the application to revise or rescind existing permit conditions that are either: 1) in error; 2) do not correctly reflect applicable requirements; 3) are out dated; or 4) are otherwise inappropriate.

On November 20, 1997 ARCO Alaska Inc [ARCO was the operator of the facility in 1997 so the application was submitted under their name. BPXA is the current operator of the facility and the application has been transferred to their name. BPXA will be identified as the applicant for the remainder of this document] submitted a construction permit application requesting revisions to operating permit No. 9273-AA017 for the FS #1, along with the Title V operating permit application for the facility. BPXA proposed that terms and conditions in the old operating permit be updated and made identical with the PSD permit number PSD-X80-09, amended August 29, 1997 by the EPA.

BPXA requests revisions to Operating Permit 9273-AA017 for the FS #1. The current permit was issued under former 18 AAC50.400. Under the provisions of 18 AAC 50.305(a)(3), the owner or operator of a facility may request Department approval in a construction permit to revise or rescind conditions of a permit issued under former 18 AAC 50.400.

On June 17, 1980, EPA Region 10 issued PSD permit number PSD-X80-09 to BPXA [actually Atlantic Richfield and Sohio Petroleum Companies, the field operators at that time] for construction of new equipment at eight Prudhoe Bay facilities. BPXA has worked with EPA to clarify and revise emission limits in the EPA PSD permit. ADEC has been copied on all correspondence with Region 10 in this regard. This effort resulted in issuance by EPA on August 29, 1997, of revisions to the EPA PSD permit. The permit revisions are included with the Permittee's application. The primary revisions include identification of specific equipment and tag number, apportionment of field-wide ton per year limits to facility–specific equipment group limits, and updating emission limits based solely on AP-42 factors to the values in the current edition of AP-42.

The construction permit application requests that each current EPA BACT emission limit be established as the current limit in the ADEC permit for the facility. Some ADEC limits have been revised to accommodate this request, or a new emission limit has been established if the current permit indicates that no limit applies.

EPA permitted three turbines at FS#1 (Tag Nos. 15-1803, 15-1804, and 15-15107) during the 1980 PSD review. Because these units have not undergone any subsequent ADEC PSD permitting and BACT determinations, emission limits should reflect exactly the limits in the August 29, 1997 revision to the EPA permit.

Attachment B of the proposed construction permit describes changes to the emission limits. The majority of these changes reflect the revised emission limits granted by EPA on August 29, 1997. The EPA revision established ton per year emission limitations for individual turbines. For turbines, ton per year emission limits apply for NO_x, CO, and PM. For NO_x, CO, and PM, EPA established BACT emission limits in terms of tons per year as well as other terms (e.g. ppmv or lb/MMBtu). Visible emission limits were established in terms of percent opacity.

Subsequent to EPA PSD permitting, some equipment was modified and permitted by ADEC under state PSD requirements. In this instance, if the new ADEC BACT is more stringent than the old EPA BACT, Region 10 agreed to remove the EPA BACT limit from their permit.

The current FS# 1 Permit (9273-AA017) indicates that each value in Attachment B is an emission limit. As requested in the application, the vast majority of these limits should be identified as emission estimates only. The only exceptions are the three turbines with EPA BACT determinations and equipment permitted under the PSD requirements by ADEC. The only BACT determinations at FS# 1 were for ARCO Alaska's GHX II project. ADEC BACT requirements applied only to NO_x. Equipment permitted under GHX II and which should continue to have NO_x emission limits are: glycol heaters 15-1495 and 15-1496, TEG reboiler 15-14001, and the Stage I and II flare system (Tag Nos. 15-14000A and 15-14000B).

In their application BPXA requested only equipment that was permitted by EPA have ton per year emission limits. The emission limit requested reflects the current EPA BACT limits. BPXA determined that ADEC established only emission factor (lb/MMBtu) BACT emission limits for NO_x for equipment for the GHX II project.

BPXA requested that any current emission limit or fuel specification limiting the concentration of H_2S or S in fuel should be changed to an emission estimate. ADEC has never established a fuel sulfur limit in natural gas at FS# 1 because a restriction was not necessary to protect SO_2 standards or increments. Also, existing equipment at FS# 1 does not have a SO_2 BACT limit. BPXA will continue to monitor sulfur content of fuels used at FS #1. In addition, the application requests to lower the estimate of H_2S fuel content from 150 ppm to 30 ppm for sources that burn Prudhoe Bay field fuel gas for calculating assessable PTE only.

Table C below identifies source inventory corrections and updates made to Operating Permit 9273-AA017.

Table C – Source Inventory Revisions

Equipment Tag No.	Current Permit Rating	New Revised Rating	Explanation
Gas Turbines			
NGT-15-1801 NGT-15-1802 NGT-15-1803 NGT-15-1804 NGT-15-15107	14,200 hp ISO 14,200 hp ISO 35,000 hp ISO 35,000 hp ISO 4,900 hp ISO	No Change	

Equipment Tag No.	Current Permit Rating	New Revised Rating	Explanation
Gas-Fired Heaters			
NGH-15-1431 NGH-15-1433 NGH-15-1481 NGH-15-1491 NGH-15-1495 NGH-15-1496	31.6 MMBtu/hr 31.6 MMBtu/hr 23.3 MMBtu/hr 23.3 MMBtu/hr 71.83 MMBtu/hr 87.95 MMBtu/hr	38.0 MMBtu/hr 38.0 MMBtu/hr 26.6 MMBtu/hr 26.6 MMBtu/hr 79.9 MMBtu/hr 67.8 MMBtu/hr	New information. Current ratings are normal design heat release rates. Revisions reflect maximum design values.
NGH-15-14001	16.185 MMBtu/hr	No Change	
NGH-15-2801 NGH-15-2811	5.2 MMBtu/hr 5.2 MMBtu/hr	6.8 MMBtu/hr 6.8 MMBtu/hr	New information. Current ratings are normal design heat release rates or, incorrect, as in the case of tag no. NGH-15-1496. Revisions reflect maximum design values.
Diesel Fired Equipment			
EDG-15-1553C	250 hp	300 hp	New information. Correct maximum rating.
EDG-15-2882	2,200 hp	No Change	
Flares			
HP/IP and STV 15-14000A 15-14000B	1.55 MMscf/day, combined total for all flares (pilot, sweep, purge, assist)	No Change	

Tables D through G below identify and explain the revisions made to Operating Permit 9273-AA017.

Equipment operational limits requested by BPXA.

Tag No.	*Description*	*Installed*	*Operating Limit*
NGT-15-1801	GE LM 1500	Circamet Liner 2/94	Combined total for 2 turbines is 12,000 hours/year
NGT-15-1802	GE LM 1500	Circamet Liner 2/94	
EDG-15-2882	White Superior		200 hours/year (non-emergency use)
EDG-15-1553C	Cummins		200 hours/year (non-emergency use)

Equipment emission limits requested by BPXA. All emission limitations are annual average unless otherwise noted. All turbine emission limits and estimates refer to full load, ISO conditions. All other emission limits and estimates refer to full load, standard conditions.

Table D - Sources: GE LM 1500 Turbines NGT-15-1801 and NGT-15-1802, GE MS 5352B Turbines NGT-15-1803, NGT-15-1804, and Ruston TB 5000 NGT-15-15107

Pollutant	Source	Limits in AQCP to Operate 9273-AA017	Revised Limits for Each Unit	Explanation
NO_X	GE LM 1500	150 ppmv @ 15% O_2	No Limit	Units are pre-PSD. No BACT or other limit applies.
	GE MS 5352B	150 ppmv @ 15% O_2	173 ppmv @ 15% O_2 and 1,115 tpy	EPA PSD II BACT and 8/29/97 permit revision.
	Ruston TB5000		154 ppmv @ 15% O_2 and 141 tpy	
CO	GE LM 1500	660 lb/MMscf fuel gas	No Limit	Units are pre-PSD. No BACT or other limit applies.
	GE MS 5352B	109 lb/MMscf fuel gas	0.17 lb/MMBtu and 269 tpy each unit	EPA PSD II BACT and 8/29/97 permit revision.
	Ruston TB5000		0.17 lb/MMBtu and 38 tpy	
PM	GE LM 1500	14 lb/MMscf	No Limit	Units are pre-PSD. No BACT or other limit applies, except for AK SIP limit.
	GE MS 5352B	14 lb/MMscf	0.014 lb/MMBtu and 22 tpy each unit	EPA PSD II BACT and 8/29/97 permit revision.
	Ruston TB5000		0.014 lb/MMBtu and 3.2 tpy	
Opacity	GE MS 5352B Ruston TB5000	No Limit	10% consecutive 6 minute average	EPA PSD II BACT and 8/29/97 permit revision.
SO_2	GE LM 1500	150 ppm H_2S in fuel	No Limit	No BACT or other limit applies to fuel. No limits are necessary to manage increment given current fuel gas quality.
	GE MS 5352B			
	Ruston TB5000			

Pollutant	Source	Limits in AQCP to Operate 9273-AA017	Revised Limits for Each Unit	Explanation
VOC	GE LM 1500	2.3 lb/MMscf	No Limit	Units are pre-PSD. No BACT or other limit applies.
	GE MS 5352B			
	Ruston TB5000			

Table E - Sources : Broach Heaters NGH-15-1431, NGH-15-1433, NGH-15-1481, and NGH-15-1491; BS&B Reboilers NGH-15-2801 and NGH-15-2811; Econotherm Glycol Heaters NGH-15-1495 and NGH-15-1496; and Smith Industries TEG Reboiler NGH-15-14001

Pollutant	Source	Limits in AQCP to Operate 9273-AA017	Revised Limits	Explanation
NO_X	Broach and BS&B	0.10 lb/MMBtu	No limit.	Units are pre-PSD.
	Econotherm and Smith	No Limit	0.08 lb/ MMBtu	ADEC BACT (GHXII) established short-term limit.
CO	Broach and BS&B	0.018 lb/MMscf	No limit.	Units are pre-PSD
	Econotherm and Smith	0.018 lb/MMscf		No BACT or other limit applies.
PM	Broach and BS&B	2.5 lb/MMscf	No limit.	Units are pre-PSD
	Econotherm and Smith	2.5 lb/MMscf		No BACT or other limit applies.
SO_2	Broach and BS&B	150 ppm H_2S in fuel	No limit.	No BACT or other limit applies to fuel. No limits are necessary to manage increment given current fuel gas quality.
	Econotherm and Smith	150 ppm H_2S in fuel		
VOC	Broach and BS&B	2.8 lb/MMscf	No limit.	Units are pre-PSD
	Econotherm and Smith	2.8 lb/MMscf		No BACT or other limit applies.

Table F - Sources: Diesel-Fired Equipment; White Superior EDG-15-2882 and Cummins EDG-15-1553C

Pollutant	Source	Limits in AQCP to Operate 9273-AA017	Revised Limits	Explanation
NO_X	White and Cummins	14.0 g/hp-hr and 200 hr/yr	Operational limit of 200 hr/yr. (does not apply to emergency operation)	No BACT or other limit applies.
CO	White and Cummins	3.03 g/hp-hr and 200 hr/yr	Operational limit of 200 hr/yr. (does not apply to emergency operation)	No BACT or other limit applies.
PM	White and Cummins	1.0 g/hp-hr and 200 hr/yr	Operational limit of 200 hr/yr. (does not apply to emergency operation)	No BACT or other limit applies.
SO_2	White and Cummins	0.5% S in fuel and 200 hr/yr	Operational limit of 200 hr/yr. (does not apply to emergency operation)	No BACT or other limit applies to fuel. No limits are necessary to manage increment given current liquid fuel quality.
VOC	White and Cummins	1.12 g/hp-hr and 200 hr/yr	Operational limit of 200 hr/yr. (does not apply to emergency operation)	No BACT or other limit applies.

Table G - Sources: Flare System; Existing (HP/IP; STV), HP Stage I (15-14000A), and HP Stage II (15-14000B)

Pollutant	Source	Limits in AQCP to Operate 9273-AA017	Revised Limits	Explanation
NO_X	Flare	0.068 lb/MMBtu	0.068 lb/MMBtu for HP stage I and II only.	ADEC BACT (GHX II) for HP stage I and II only.
CO	Flare	0.37 lb/MMBtu	No Limit	No BACT or other limits apply.
PM	Flare	40 µg/l	No Limit	No BACT or other limits apply.
SO_2	Flare	150 ppm H_2S in fuel	No Limit.	No BACT or other limit applies to fuel. No limits are necessary to manage increment given current fuel gas quality.
VOC	Flare	0.14 lb/MMBtu	No Limit	No BACT or other limits apply.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The state and federal regulations for each condition are cited in Operating/Construction Permit No. 167TVP01.

Conditions 1 and 2, Emission Fees

Applicability: The regulations require all permits to include due dates for the payment of fees and any method the Permittee may use to re-compute assessable emissions.

Factual Basis: These standard conditions require the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date.

The default assessable emissions are emissions of each air contaminant authorized by the permit (AS 46.14.250(h)(1)(A)). Air contaminant means any regulated air contaminant and any hazardous air contaminant. Therefore, assessable emissions under AS 46.14.250(h)(1)(A) means the potential to emit any air contaminant identified in the permit, including those not specifically limited by the permit. For example, hydrogen chloride (HCl) emissions from an incinerator are assessable emissions because they are a hazardous air contaminant, even if there is currently no emission limit on HCl for that class of incinerator.

The conditions also describe how the Permittee may calculate actual annual assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1)(B), assessable emissions are based on each air contaminant. Therefore, fees based on actual emissions must also be paid on any contaminant emitted whether or not the permit contains any limitation of that contaminant.

This standard condition specifies that, unless otherwise approved by the Department, calculations of assessable emissions based on actual emissions use the most recent previous calendar year's emissions. Since each current year's assessable emissions are based on the previous year, the Department will not give refunds or make additional billings at the end of the current year if the estimated emissions and current year actual emissions do not match. The Permittee will normally pay for actual emissions - just with a one-year time lag.

Projected actual emissions may differ from the previous year's actual emissions if there is a change at the facility, such as changes in equipment or an emission rate from existing equipment.

If the Permittee does not choose to annually calculate assessable emissions, emissions fees will be based on “potential to emit” (PTE).

The PTE set forth in the condition is based on liquid fuel with a sulfur content of 0.5% by weight or fuel gas with a sulfur content of 30 ppm H_2S by volume. If the actual sulfur content of the fuel is greater than these assumptions, the assessable emissions calculations provided by the Permittee should reflect the actual sulfur content.

Condition 3 and Section 6, Visible Emissions Standard

Applicability: This regulation applies to operation of all fuel-burning equipment in Alaska. Source ID(s) 1 through 19 are fuel-burning equipment.

Factual basis: Condition 3 requires the Permittee to comply with the federal and the state visible emission standards applicable to fuel-burning equipment. BACT visible emissions standards from EPA PSD permits for Source ID(s) 3 through 5 are also included in this condition. The Permittee shall not cause or allow the equipment to violate these standards.

This condition has recently been adopted into regulation as a standard condition. MR&R requirements are listed in Section 6 of the permit.

Gas Fired:

Monitoring – The monitoring of gas fired sources for visible emissions is waived, i.e. no source testing will be required. The Department has found that natural gas fired equipment inherently has negligible PM emissions. However, the Department can request a source test for PM emissions from any smoking equipment.

Reporting – The Permittee must annually certify that only gaseous fuels are used in the equipment.

Liquid Fired:

Monitoring – The visible emissions may be observed by Method-9 plan as detailed in Section 6. Corrective actions such as maintenance procedures and either more frequent or less frequent testing may be required depending on the results of the observations.

Recordkeeping - The Permittee is required to record the results of all visible emission observations and record any actions taken to reduce visible emissions.

Reporting - The Permittee is required to report: 1) emissions in excess of the federal and the state visible emissions standard, and 2) deviations from permit conditions. The Permittee is required to include copies of the results of all visible emission observations with the facility operating report.

Insignificant Sources:

For Source ID(s) 15 and 16, as long as they do not exceed 400 hours of operation per consecutive 12-month period no monitoring is required in accordance with recently issued Department Guidance AWQ 02-014. The Permittee must annually certify compliance with the opacity standard.

Flares:

Monitoring for flares (Source ID(s) 17 through 19) requires Method-9 observations of scheduled flaring events lasting more than one hour. The Permittee must report the results of these observations to the Department.

Condition 4 and Section 6, Particulate Matter (PM) Standard

Applicability: The PM standard applies to operation of all fuel burning equipment in Alaska. Source ID(s) 1 through 19 are fuel-burning equipment. The SIP standard for PM applies to all fuel-burning equipment because it is contained in the federally approved SIP dated October 1983.

Factual basis: Condition 4 requires the Permittee to comply with the state PM (also called grain loading) standard applicable to fuel-burning equipment. The Permittee shall not cause or allow fuel-burning equipment to violate this standard.

MR&R requirements are listed in Section 6 of the permit.

Gas Fired:

Monitoring – The monitoring of gas fired sources for particulate matter is waived, i.e. no source testing will be required. The Department has found that natural gas fired equipment inherently has negligible PM emissions. However, the Department can request a source test for PM emissions from any smoking equipment.

Reporting – The Permittee must annually certify that only gaseous fuels are used in the equipment.

Liquid Fired:

Monitoring – The Permittee is required to conduct PM source testing if threshold values for opacity are exceeded.

Recordkeeping - The Permittee is required to record the results of PM source tests.

Reporting - The Permittee is required to report: 1) incidents when emissions in excess of the opacity threshold values have been observed, and 2) results of PM source tests. The Permittee is required to include copies of the results of all visible emission observations with the facility operating report.

Insignificant Sources:

For Source ID(s) 15 and 16, as long as they do not exceed 400 hours of operation per consecutive 12-month period no monitoring is required in accordance with recently issued Department Guidance AWQ 02-014. The Permittee must annually certify compliance with the particulate matter standard.

Flares:

Monitoring of gas fired flares for particulate matter is waived, i.e. no source testing will be required, because of the difficulty and questionable results these tests produce when applied to flares. The Department has recognized this fact by incorporating the waiver in the State Implementation Plan adopted in November 1984 which has not been federally approved. No recordkeeping or reporting is required.

Condition 5, Sulfur Compound Emissions

Applicability: The sulfur emission standard applies to operation of all fuel-burning equipment in the State of Alaska. Source ID(s) 1 through 19 are fuel-burning equipment. The SIP standard for sulfur dioxide applies because it is contained in the federally approved SIP dated October 1983.

Factual basis: The condition requires the Permittee to comply with the sulfur emission standard applicable to fuel-burning equipment. The Permittee may not cause or allow the affected equipment to violate this standard.

Sulfur dioxide comes from the sulfur in the liquid, hydrocarbon fuel (e.g. diesel or No. 2 fuel oil). Fuel containing no more than 0.75% sulfur by weight will always comply with the emission standard. For fuels with a sulfur content higher than 0.75%, the condition requires the Permittee to use Section 16 to calculate the sulfur-dioxide concentration using the equations to show that the standard is not exceeded.

Fuel sulfur testing will verify compliance.

Fuel gas sulfur is measured as hydrogen sulfide (H_2S) concentration in ppm by volume (ppmv). Calculations[8] show that fuel gas containing no more than 4000 ppm H_2S will always comply with this emission standard. This is true for all fuel gases, even with no excess air.

Equations to calculate the exhaust gas SO_2 concentrations resulting from the combustion of fuel gas were not included in this permit. Fuel gas with an H_2S concentration of even 10 percent of 4000 ppm is currently not available in Alaska and is not projected to be available during the life of this permit.

Recordkeeping - For liquid fuel the Permittee is required to record the fuel sulfur content , and for fuel gas, the H_2S concentration of the fuel gas.

Reporting – The Permittee is required to report as "state" excess emissions whenever the fuel combusted causes sulfur compound emissions to exceed the standards in this condition. The Permittee is required to include the material balance calculations for fuel oil in the excess emissions report.

The Permittee is required to include copies of the records mentioned in the previous paragraph with the facility operating report.

Conditions 6 and 7, BACT Emission Limits

Applicability The BACT conditions apply because they were developed during PSD reviews of facility by both the EPA and ADEC. These conditions require the Permittee to comply with the emission limits derived from BACT analysis. The Permittee may not cause or allow their equipment to violate these limits.

Factual basis: Between 1979 and 1981, EPA Region 10 issued four PSD permits for Prudhoe Bay Facilities. On August 29, 1997 EPA issued revisions to the four PSD permits. The primary revisions include identification of specific equipment and tag numbers, apportionment of either field-wide or facility-wide ton per year limits to unit specific limits, and updating emission limits based solely on AP-42 factors to values in the current edition of AP-42.

As part of the EPA process it was demonstrated to Region 10 that on a ton per year basis an overall decrease in allowable emissions would occur under the permit revision. The only exception was an increase in allowable SO_2 emissions due to subsequent permitting by ADEC that raised the SO_2 BACT limit established by EPA in one of the four EPA permits issued (PSD IV).

[8] See ADEC Air Permits Web Site at http://www.state.ak.us/dec/dawq/aqm/newpermit.htm, under "Stoichiometric Mass Balance Calculations of Exhaust Gas SO_2 Concentration."

The majority of these changes reflect the revised emission limits granted by EPA on August 29, 1997. The EPA revision established ton per year emission limitations on a group basis for turbines. For Source IDs 3 through 5, ton per year emission limits apply for NO_x, CO, and PM. For NO_x, CO, and PM EPA also established short-term BACT emission limits in other terms (i.e. ppm, lb/MMscf, or lb/MMBtu).

The EPA revisions have been incorporated into this Title V Operating Permit. For Source IDs 3 through 5 the Permittee is required to calculate and report emission levels for the NO_x, CO, and PM. Monitoring for compliance with the short-term BACT emission limit for NO_x is identical to that for Subpart GG turbines.

For Source IDs 10 through 12, and 18 and 19 ADEC established short-term BACT NOx emission limits during review of the GHX II project. Monitoring consists of inspections of maintenance records.

Conditions 8 through 12, Operating Permit Requirements Carried Forward

Applicability and Factual Basis: The old operating permit 9273-AA017 contained conditions that must be carried forward to this Title V permit. These conditions contain requirements to measure fuel consumption so that emission levels may be calculated, to monitor flue gas for heaters rated at greater than 43 MMBtu/hr, and to monitor operating hours for emergency equipment and gas-fired turbines and heaters.

Conditions 13 through 18, NSPS Subpart A Requirements

Applicability The Department has incorporated by reference the NSPS effective July 1, 1999, for specific industrial activities, as listed in 18 AAC 50.040.

Most (with the exception of some storage tanks) sources subject to an NSPS are subject to Subpart A. At this facility, Source IDs 3 through 5 are subject to NSPS Subpart GG and Source IDs 10 through 12 are subject to NSPS Subpart Dc and Source ID 20 is subject to Subpart Ka, and therefore subject to Subpart A.

Condition 13 - Start-up, shutdown, or malfunction record maintenance requirements in 40 C.F.R. 60.7(b) are applicable to all NSPS sources subject to Subpart A.

Condition 14 - Excess emission reporting requirements in 40 C.F.R. 60.7(c) & (d) are applicable to Source IDs 3 through 5 because there are applicable emission standards. The Department has included in Attachment A of the basis a copy of the federal EEMSP reporting form for use by the facility.

Condition 15 - Performance (Source) Tests requirements contained in 40 C. F. R. 60.8 are applicable to Source IDs 3 and 4.

Condition 16 - Good air pollution control practices in 40 C.F.R. 60.11(d) are applicable to all NSPS sources subject to Subpart A (Source IDs 3 through 5, 10 through 12, and 20).

Condition 17 – Credible Evidence procedures in 40 C.F.R. 60.11(g) are applicable to all NSPS sources subject to Subpart A with applicable standards (Source IDs 3 through 5, and 20).

Condition 18 - Concealment of emissions prohibitions in 40 C.F. R. 60.12 are applicable to Source IDs 3 through 5 and 20.

Recordkeeping requirements in 40 C.F.R. 60.7(f) are applicable to all NSPS sources. (Satisfied by condition 60)

The flare is not subject to 40 C.F. R. 60.18 because it is a safety device and not a control device. It does not receive any tank vapors from any NSPS regulated sources.

Factual Basis: General provisions of 40 CFR 60, Subpart A apply to owners or operators who are subject to a relevant subpart under Part 60, except when otherwise specified in an applicable subpart or relevant standard. The intent of Subpart A is to eliminate the repetition or requirements applicable to all owners or operators affected by NSPS.

Condition 19, NSPS Subpart Dc Recordkeeping and Reporting Requirements

Applicability: NSPS Subpart Dc applies to steam generating units for which construction, modification, or reconstruction commenced after June 9, 1989 and have maximum design heat input capacities of 29 MW (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). Source ID(s) 10 through 12 are subject to Subpart Dc.

Source ID(s) 10 through 12 burn only natural gas and are not subject to the SO_2 standard in 40 C.F.R. 60.42c or the PM standard in 40 C.F.R. 60.43c.

Factual Basis: The condition requires the Permittee to comply with the Subpart Dc recordkeeping and reporting requirements.

Conditions 20 and 21, NSPS Subpart GG Requirements

Applicability: NSPS Subpart GG applies to stationary gas turbines with a heat input at peak load (maximum load at 60 percent relative humidity, 59 degrees F, and 14.7 psi) equal to or greater than 10.7 gigajoules per hour (10 MMBtu/hr), based on the lower heating value of the fuels fired and constructed, modified, or reconstructed after October 3, 1977.

Factual Basis: These conditions incorporate NSPS Subpart GG NO_X emission and sulfur compound limits. The Permittee may not allow equipment to violate these standards.

NO_X Standard: For a turbine subject to 40 C.F.R. 60.332, the NO_X standard is determined by the following equation:

$$STD_{NOX} = 0.015(14.4 / Y) + F$$

where,

STD_{NOX} = allowable NO_X emissions (percent by volume at 15 percent oxygen and on a dry basis)

Y = manufacturer's maximum rated heat input (kJ/W-hr), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the affected facility. The value of Y shall not exceed 14.4 kJ/W-hr

F = NO_X emissions allowance for fuel bound nitrogen, percent by volume, **assumed to be zero for Alaska fuel**.

Based on the manufacturer's heat rating at manufacturer's rated peak load, and assuming fuel bound nitrogen of zero, the NO_X standard is 173 ppmv for Source ID(s) 3 & 4. Source ID 5 is exempt from 40 CFR 60.332 Subpart GG NO_x requirements because it satisfies the exemption listed in 40 CFR 60.332(e).

SO_2 Standard: The Permittee is required to comply with one of the following sulfur requirements for Source ID(s) 3 through 5 (turbines):

(1) do not cause or allow SO_2 emission in excess of 0.015 percent by volume, at 15 percent O_2 and on a dry basis (150 ppmv), or

(2) do not cause or allow the sulfur content for the fuel burned in Source ID(s) 3 through 5 to exceed 0.8 percent by weight .

Condition 21 cites the monitoring requirements of the EPA approved alternative monitoring plan and schedule granted BPXA in accordance with 40 C.F.R. 60.334(b)(2). EPA approved the alternative monitoring plan and schedule in correspondence to BPXA dated July 13, 1993, August 20, 1993, October 18, 1993, August 19, 1996, and October 2, 1997.

Conditions 20.1 through 20.3, NO_X Monitoring, Recordkeeping, and Reporting

Applicability: Periodic monitoring is included in condition 20.1. This additional monitoring is necessary to ensure that turbine emissions stay below the NSPS NO_X standard.

Factual basis: The Department does not have enough information to make categorical determinations that certain types of turbines, or turbines with emission test results below a certain percentage of the Subpart GG NO_x emission limit will inherently comply with the Subpart GG limit at all times and will never need additional testing. After a sufficient body of NO_x data is gathered under monitoring conditions for compliance with 40 C.F.R. 60, Subpart GG, the Department may find that it has enough information to make such categorical determinations. In that event, the Department would revise the NO_x monitoring conditions. The Department may determine that to assure compliance it is necessary to retain or increase the current monitoring frequency.

These conditions do not include the initial NSPS performance test requirements. If a turbine under this permit is still subject to the performance test requirement of 40 C.F.R. 60.8, a source specific condition will be necessary.

The intent of these conditions is that turbines or groups of turbines be initially tested on a 5-year cycle. If no testing is required during the permit term, and if the same condition were used in the renewal permit initial testing could be on a 10-year testing cycle. After the first testing cycle, the Department intends to re-evaluate the necessary monitoring frequency.

The condition does not state how load must be measured. For some turbines it may be possible to directly measure load as either mechanical or electrical output. For others, it may be necessary to calculate load indirectly based on measurements of other parameters. The Department is not attempting to dictate what method is most appropriate through the permit condition, but should evaluate the adequacy of methods of calculating load based on the load monitoring proposed by the Permittee.

Subpart GG defines "emergency gas turbine" and exempts turbines meeting that definition from the GG emission standards. Some turbines may be operated as standby equipment but not meet the definition of emergency turbine, so the Department has added a Method 20 monitoring threshold of 400 hours per 12 month period. For turbines expected to operate less than 400 hours the Department has also added recordkeeping for hours of operation. The Department does not intend to require the Permittee to operate a turbine solely for the purpose of testing.

The condition requires testing at a range of loads, consistent with the performance test requirements in Subpart GG, that is, test at 30, 50, 75, and 100% load. If testing at these four loads is not reasonable, the condition allows the Permittee to propose to the Department what test loads will be reasonable and adequate, and the Department will have the responsibility to make a finding on that proposal. If EPA has already approved alternative test loads for the initial performance test the Department would allow those test loads if the information that went into that decision were still representative of the turbine operation.

In condition 20.1c(iii)(A)(3), the Department considers "fuel type" to mean, for liquid fuels a type of fuel as described in an ASTM or similar fuel specification.

Load measurements or load calculations from load surrogate measurements are for one-hour periods. The intent is to match the averaging period for the test method. Method 20 identifies a number of traverse points that vary with the size of the stack. From these points the tester is to choose at least 8 points for NO_x measurements. The time at each point is to be at least one minute plus the average response time of the instrument. The recorded value is the average steady state response. Presumably, the steady state response would exclude some or all of the response time of the instrument. Three runs are to be done at each test load.

The three runs would represent 24 minutes of measurement time or more. A one-hour average load is therefore a reasonable approximation of a load period corresponding to the test method.

Conditions 22 through 27 (Section 6), Visible Emissions and PM Monitoring Plan

Applicability: Applies because these conditions detail the monitoring, recordkeeping, and reporting required in conditions 3 and 4.

Factual Basis: Each permit term and condition must include MR&R requirements showing verifiable compliance with each permit term and condition. The Permittee must establish by actual visual observations which can be supplemented by other means, such as a defined Facility Operation and Maintenance Program, that the facility is in continuous compliance with the State's emission standards for visible emissions and particulate matter. The correlation between particulate matter and visible emissions that is the basis for this monitoring procedure is discussed under conditions 3 and 4.

These conditions detail a stepwise process for monitoring compliance with the State's visible emissions and particulate matter standards for liquid fired sources. Equipment types covered by these conditions at Flow Station #1 are internal combustion engines. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program. The monitoring frequency in condition 22 is not as frequent as in 18 AAC 50.346(c) because all the

monitored equipment is emergency equipment which would seldom experience more than 400 hours of operation per year.

Monitoring frequencies for liquid hydrocarbon fuels are detailed in these conditions.

Reasonable action thresholds are established in these conditions that require the Permittee to progressively address potential visible emission problems from sources either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

More details are found in the Factual Basis statement for Conditions 3 and 4.

Condition 28 (Section 6), Visible Emissions MR&R Plan for Flares

Applicability: Applies because this condition details the monitoring, recordkeeping, and reporting required to demonstrate compliance with condition 3 for gas-fired flares.

Factual Basis: Condition 28 was developed to provide a standardized version of flare monitoring that is not dependent upon the type or design of upstream equipment. It has been claimed that gas-fired flares normally burn without emitting visible emissions, but actual field data demonstrating this assumption is not available. However, gas-fired flares have been shown to smoke when a control device, i.e. a knockout drum, flare scrubber, gas or steam assist, or vapor recovery system malfunctions. Thus, the condition sets out a protocol to collect actual field data to determine compliance with the 20% opacity standard for flares.

A recent Department analysis of industry flaring operations indicates that 49% of the gas flared (by volume) is for pilot/purge, 25% is for flaring less than one hour, and 26% is for flaring that lasts more than one hour. Pilot/purge flaring constitutes half of all flaring by volume and is continuous in nature and can be observed at any time. This type of flaring has not caused violations of the opacity standard in the past and can be checked at any time by agency inspectors. The remaining half of the flaring volume is split evenly between less than and greater than one-hour duration. Therefore, the monitoring scheme in this condition addresses the half of the non-continuous flaring operations that are scheduled and for which a certified observer can reasonably be located onsite.

Since it is impractical to require facilities to have a certified Method-9 opacity reader on site for unpredictable emergency flaring, the monitoring protocol requires Method-9 readings only during scheduled flare events. Scheduled events such as those generated by maintenance activities and well testing of greater than one-hour in duration will be observed. These one-hour events are currently quantified and reported to the Alaska Oil and Gas Conservation Commission for other reasons and thus provides a confirming information record of the occurrence of these events. Only those events as defined in the condition need to be monitored. If no events meeting this definition occur during the life of the permit then no monitoring is required.

Since only flaring that is scheduled and exceeds one hour is required to be observed operators will have time to provide certified Method-9 readers onsite. Most oil and gas production facilities in Alaska are located at remote sites so it is not reasonable to self-monitor all or even a large sample of the flaring that occurs. Data collected from planned events will help the Department refine this monitoring scheme during future permit cycles. Process upsets and emergency events that may or may not exceed one hour occur randomly and do not lend themselves easily to periodic monitoring. At this time, the Department will rely on facility excess emission reports, citizen complaints, and agency inspections for information concerning these short term and emergency events.

Conditions 29 and 30, Halon Prohibitions

Applicability: These prohibitions apply to all facilities that use halon for fire extinguishing and explosion inertion. The Flow Station #1 uses halon and is therefore subject to the federal regulations contained in 40 CFR 82.

Factual basis: These conditions incorporate applicable 40 CFR 82 requirements. The Permittee may not cause or allow violations of these prohibitions. No additional MR&R requirements are required to ensure compliance with these federal requirements.

Conditions 31 through 34, Insignificant Sources

Applicability: These general emission standards apply to all industrial processes fuel-burning equipment, and incinerators regardless of size.

Factual basis: Conditions 31 through 34 require the Permittee to comply with the general standards for insignificant sources. The Permittee may not cause or allow their equipment to violate these standards. Insignificant sources are not listed in the permit unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance.

The Department finds that the insignificant sources at this facility do not need specific monitoring, recordkeeping and reporting to ensure compliance with these conditions.

Condition 35, NSPS Subpart Ka VOC Standard - Compliance Plan

Applicability: State regulations require that a Title V operating permit contains a compliance plan for permit conditions, emission standards, or regulations for which the facility is currently in violation.

Factual Basis: The storage vessel identified as Source ID 20 in this permit was installed at Flow Station #1 in 1981, at that time Flow Station #1 was operated by ARCO Alaska Inc. At that time, ARCO considered the working capacity of the vessel to be less than 420,000 gallons (10,000 barrels) and therefore exempt from Subpart Ka. Recently BPXA assumed operational control over the Flow Station #1 after its corporate merger with ARCO Alaska Inc.

The U.S. EPA has issued an Applicability Determination Index memorandum that implements a policy for determining “capacity” and “design capacity” of storage tanks. The new policy specifies that the tank’s internal shell dimensions shall be used to determine “capacity” and “design capacity.” The “design capacity” of this tank, based on the internal shell dimensions, is greater than 420,000 gallons. As a result of the memorandum, it now appears that Subpart Ka applies to Overflow Dirty Water Tank tag no. 15-1951 at Flow Station #1 (Source ID 20). BPXA is working to equip the tank with a vapor recovery system

to satisfy the requirements of §60.112a(a)(3). BPXA has commenced work on the installation of the system and anticipates installation will be completed on or before September 30, 2003. BPXA will submit the tank operations and maintenance plan required by §60.113a(a)(2)(iii) when the vapor recovery system becomes operational.

Condition 35 requires BPXA to be in full compliance with Subpart Ka by September 30, 2003.

Condition 36, NESHAPs Subpart A, Applicability Determination

Applicability: NESHAPs Subpart A requirements apply to facilities categorized in 40 C.F.R. 63.

Factual Basis: The condition requires the Permittee to retain records of NESHAP applicability determinations.

Condition 37, Asbestos NESHAP

Applicability: The asbestos demolition and renovation requirements apply if the Permittee engages in asbestos demolition or renovation.

Factual Basis: The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 C.F.R. 61, Subpart M. Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to ensure compliance with these federal regulations.

Condition 38, Refrigerant Recycling and Disposal

Applicability: Applies if the Permittee engages in the recycling or disposal of certain refrigerants.

Factual Basis: The condition requires the Permittee to comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F, that will apply if the Permittee uses certain refrigerants. Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to ensure compliance with this federal regulation.

Condition 39, Good Air Pollution Control Practice

Applicability: Applies to all sources, **except** NSPS regulated sources, i.e. Source ID(s) 3 through 5, 10 through 12, and 20.

Factual basis: The condition requires the Permittee to comply with good air pollution control practices for all sources.

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the Department may have to apply more frequent periodic monitoring requirements (unless the monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that maintenance has been deferred.

Condition 40, Dilution

Applicability: This state regulation applies to the Permittee because the Permittee is subject to emission standards in 18 AAC 50.

Factual Basis: The condition prohibits the Permittee from diluting emissions as a means of compliance with any standard in 18 AAC 50. No specific monitoring for this condition is practical. Other than the required annual certification, no monitoring, recordkeeping or reporting is necessary for this condition. The Permittee presently does not dilute emissions. Dilution would probably require a physical change to the facility. A reasonable inquiry and certification by a responsible official as to whether such changes occurred over the reporting period is sufficient to assure compliance.

Condition 41, Reasonable Precautions to Prevent Fugitive Dust

Applicability: Bulk material handling requirements apply to the Permittee because the Permittee could engage in bulk material handling, transporting, or storing; or will engage in industrial activity at the facility.

Factual Basis: The underlying regulation, 18 AAC 50.045(d), requires the Permittee to take reasonable action to prevent particulate matter (PM) from being emitted into the ambient air.

Condition 42, Stack Injection

Applicability: Stack injection requirements apply to the facility because the facility contains a stack or source constructed or modified after November 1, 1982.

Factual Basis: The condition prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e. disposing of material by injecting it into a stack). No specific monitoring for this condition is practical. Other than the required annual certification, no monitoring, recordkeeping or reporting is necessary for this condition. The Permittee presently does not inject wastes into stacks. Waste injection would probably require a physical change to the facility. A reasonable inquiry and certification by a responsible official as to whether such changes occurred over the reporting period is sufficient to assure compliance. Compliance is ensured by inspections, because the source or stack would need to be modified to accommodate stack injection.

Condition 43, Open Burning

Applicability: The open burning state regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the facility.

Factual Basis: The condition requires the Permittee to comply with the regulatory requirements when conducting open burning at the facility.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Additional monitoring is achieved through condition 44, which requires a record of complaints. Therefore, the Department does not believe that additional monitoring is warranted.

Condition 44, Air Pollution Prohibited

Applicability: Air Pollution Prohibited requirements apply to the facility because the facility will have emissions.

Factual Basis: The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. While the other permit conditions and emissions limitation should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

The Permittee is required to report any complaints and injurious emissions. The Permittee must keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for these complaints and to submit copies of these records upon request of the Department.

The Department will determine whether the necessary actions were taken. No corrective actions are necessary if the complaint is frivolous or there is not a violation of 18 AAC 50.110, however this condition is intended to prevent the Permittee from prejudging that complaints are invalid.

Condition 45, Technology-Based Emission Standard

Applicability: Technology Based Emission Standard requirements apply to the facility because the facility contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or other "technologically feasible" determinations.

Factual Basis: The Permittee is required to take reasonable steps to minimize emissions if certain activity causes an exceedance of any technology-based emission standard in this permit. The conditions of this permit list applicable technology-based emission standards and require excess emission reporting for each standard in accordance with condition 61. Excess emission reporting under condition 61 requires information on the steps taken to minimize emissions, the report required under condition 61 is adequate monitoring for compliance with this condition.

Condition 46, Permit Renewal

Applicability: Applies if the Permittee intends to renew the permit.

Factual Basis: The Permittee is required to submit an application for permit renewal by the specific dates applicable to Flow Station #1 as listed in this condition. Monitoring, recordkeeping, and reporting for this condition consist of the application submittal. No additional requirements are necessary to ensure compliance with this condition.

Condition 47, Requested Source Tests

Applicability: Applies because this is a standard condition to be included in all permits.

Factual Basis: The Permittee is required to conduct source tests as requested by the Department. Monitoring consists of conducting the requested source test, and no recordkeeping or reporting requirements are necessary to ensure compliance with this condition.

Conditions 48 through 50, Operating Conditions, Reference Test Methods, Excess Air Requirements

Applicability: Apply because the Permittee is required to conduct source tests by this permit.

Factual Basis: The Permittee is required to conduct source test as set out in conditions 48 through 50. These conditions supplement the specific monitoring requirements stated elsewhere in this permit. The test reports required by condition 55 adequately monitor compliance with conditions 48 through 50, therefore no additional MR&R requirements are necessary to ensure compliance with these conditions.

Condition 51, Test Exemption

Applicability: Applies when the source exhaust is observed for visible emissions.

Factual Basis: As provided in 18 AAC 50.345(a), 5/03/02, the requirements for test plans, notifications and reports do not apply to visible emissions observations by smoke readers, except in connection with required particulate matter testing.

Conditions 52 through 55, Test Deadline Extension, Test Plans, Notifications and Reports

Applicability: Apply because the Permittee is required to conduct source tests by this permit.

Factual Basis: Standard conditions 18 AAC 50.345(l) - (o) are incorporated through these conditions. Because these standard conditions supplement specific monitoring requirements stated elsewhere in this permit no MR&R is required. The source test itself is adequate to monitor compliance with this condition.

Condition 56, Particulate Matter (PM) Calculations

Applicability: Applies when the Permittee tests for compliance with the PM standard.

Factual Basis: The condition incorporates a regulatory requirement for PM source tests. Because this condition supplements specific monitoring requirements stated elsewhere in this permit, no MR&R is required to ensure compliance with this condition.

Condition 57, Certification

Applicability: This is a standard condition to be included in all permits. Applies because every permit requires the Permittee to submit reports.

Factual Basis: This condition requires the Permittee to certify all reports submitted to the Department. To ease the certification burden on the Permittee, the condition allows the excess emission reports to be **certified** with the facility operating report, even though it must still be **submitted** more frequently than the facility operating report. This condition supplements the reporting requirements of this permit, therefore no additional MR&R is necessary to ensure compliance with this condition.

Condition 58, Submittals

Applicability: Applies because the Permittee is required to send reports to the Department.

Factual Basis: This condition requires the Permittee to send submittals to the address specified in this condition. Receipt of the submittal at the correct Department office is sufficient monitoring for this condition. This condition supplements the reporting requirements of this permit, therefore no additional MR&R is necessary to ensure compliance with this condition.

Condition 59, Information Requests

Applicability: Applies to all Permittees, and incorporates a standard condition.

Factual Basis: This condition incorporates a standard condition in regulation, which requires the Permittee to submit information requested by the Department. Receipt of the requested information is adequate monitoring.

Condition 60, Recordkeeping Requirements

Applicability: Applies because the Permittee is required by the permit to keep records.

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide adequate evidence of compliance with this requirement, therefore, no additional MR&R is required.

Condition 61, Excess Emission and Permit Deviation Reports

Applicability: Applies when the emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions - the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The condition mandates use of the Department's reporting form.

The reports themselves and the other monitoring records required under this permit provide an adequate monitoring of whether the Permittee has complied with the condition. Therefore, no additional MR&R is necessary to ensure compliance with this condition. Please note that there may be additional federally required excess emission reporting requirements.

Condition 62, NSPS and NESHAP Reports

Applicability: Applies to facilities subject to NSPS and NESHAP federal regulations.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60 and 40 C.F.R. 61. The condition does not need any MR&R. The reports themselves are adequate monitoring for compliance with this condition.

Condition 63, Facility Operating Reports

Applicability: Applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit and does not need any MR&R. The reports themselves are adequate monitoring for compliance with this condition.

Condition 64, Annual Compliance Certification

Applicability: Applies to all Permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. Because this requirement is a report, no MR&R is needed.

Conditions 65 through 71, Standard Conditions

Applicability: Apply because these are standard conditions to be included in all permits.

Factual Basis: These are standard conditions required for all operating permits.

Condition 72, Permit Shield

Applicability Applies because the Permittee has requested a shield for the applicable requirements listed under this condition.

Factual Basis: Table 4 of Operating Permit No. 167TVP01 shows the permit shields that the Department granted to the Permittee. The permit conditions set forth the requirements that the Department determined were not applicable to the facility. The following table shows the requests that were denied and the reason that they were denied. The Department based the determinations on the permit application, past operating permit, construction permits and inspection reports.

Table H - Permit Shields Denied

Shield requested for:	Reason for shield request:	Reason for request denial:
Facility-Wide		

Shield requested for:	Reason for shield request:	Reason for request denial:
18 AAC 50.045(b) - Prohibitions	The permit implements all applicable air quality requirements for the facility. Since compliance with the permit will constitute compliance with applicable local, state, or federal air quality laws, this requirement is not directly applicable to the facility.	These prohibitions are ongoing requirements and therefore cannot be shielded. They have not been placed in the permit because they add no value to the permit with respect to controlling facility emission sources. These prohibitions remain in effect because they are in regulation whether they appear in the facility operating permit or not. Shielding the applicant from subparagraph (b) for instance would have the effect of shielding the applicant from all requirements contained in the Air Quality Control Regulations including the requirement to obtain a permit if the shield requested is granted.
18 AAC 50.045(c) - Prohibitions	This requirement will be implemented through 18 AAC 50.201, which is otherwise addressed in the permit. This requirement is not applicable because the Department will impose any special requirements to protect ambient air quality through permit conditions adopted under 50.201.	

Shield requested for:	Reason for shield request:	Reason for request denial:
AQC Permit 9273-AA017 Conditions 1, 4, 8-12, 15	These permit conditions are not "facility-specific" requirements." Therefore, they are not required to be identified in the Title V permit application [ref. 18 AAC 50.335(e)(5)].	There is no need to shield the Permittee from requirements of previous operating permits. According to state regulation 18 AAC 50.340(i**) Permit Continuity** an operator must comply with a permit issued before January 18, 1997 until the department issues a Title V operating permit. Therefore, there is no reason to shield BPXA from a permit that they no longer need to comply with once this operating permit is issued. Facility-specific conditions from permit number 9273-AA017 that need to be carried forward into this operating permit according to regulation 18 AAC 50.350(d)(1)(D) have been identified in Table B of the basis.
AQC Permit 9273-AA017 Condition 2	This requirement expired on 11/11/94. Condition no longer applicable.	
AQC Permit 9273-AA017 Condition 3	The proposed Title V permit conditions have included the most stringent applicable emission standards. This requirement is no longer needed.	
AQC Permit 9273-AA017 Condition 6 and Exhibit D, item 4	The requirement to calculate and report monthly SO_2 emissions was, instituted in response to ADEC's concern that increasing sulfur in fuel content due to reservoir aging could cause a PSD modification. ADEC has previously granted BPX's requests to remove this condition from the permits of other BPX facilities.	

Attachment A

Figure 1--Summary Report -- Excess Emission and Monitoring System Performance
Pollutant (Circle One—SO_2/NO_X/fuel sulfur)
Reporting period dates:
From _____to _____
Company:
Emission Limitation _____
Address:
Monitor Manufacturer and Model No. _____
Date of Latest CMS (CEMS and PEMS) Certification or Audit
_____
Process Unit(s) Description:
Total source operating time in reporting period[1]_____

Emission data summary[1]	CMS (CEMS and PEMS) performance summary[1]
1. Duration of excess emissions in reporting period due to:	**1. CMS (CEMS and PEMS) downtime in reporting period reporting period due to:**
a. Startup/shutdown _____	**a. Monitor equipment malfunctions** _____
b. Control equipment problems _____	**b. Non-Monitor equipment malfunctions** _____
c. Process problems _____	**c. Quality assurance calibration** _____
d. Other known causes _____	**d. Other known causes** _____
e. Unknown causes _____	**e. Unknown causes** _____
2. Total duration of excess emission _____	**2. Total CMS (CEMS and PEMS) Downtime** _____
3. Total duration of excess emissions X (100) [Total source operating time] _____%[2]	**3. [Total CMS (CEMS and PEMS) Downtime] X (100) /[Total source operating time] _____%**[2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.
[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS (CEMS or PEMS) downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in this condition shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

Name

Signature